### FEEDING A DRAGON:

# RAMIFICATIONS OF OVERREACTING TO CHINA'S RELATIVE RISE

BY

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# **APPROVAL**

The undersigned certify that this thesis argumentation, and expression.	meets master's-level standards of research,
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#### **ABSTRACT**

This study investigates the strategic implications of the complex US-Sino relationship, particularly as America rebalances toward the Asia-Pacific region. The author examines the relationship through multiple prisms of international relations theory. Economic context and interdependence complicates the relationship. Perception of the relationship is critical, as a mismanaged fear of a rising China could limit America's economic vitality and international influence. A self-induced security dilemma will be disproportionately costly for the United States, as an economically strong China spends comparatively little with asymmetric capabilities. The author compares this scenario with the collapse of the former Soviet Union. The result of this study determines overemphasis on Chinese conventional capabilities will provide the United States detrimental opportunity cost toward aggregate global interests.



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# **CONTENTS**

Chapte	Page Page
	APPROVALi
	DISCLAIMERii
	ABOUT THE AUTHORiii
	ACKNOWLEDGEMENTSiv
	ABSTRACTv
	INTRODUCTION1
1	REGIONAL INTERESTS AND THEORETICAL BACKGROUND5
2	ECONOMIC CONTEXT
3	ASYMMETRIC SPENDING
4	THE SOVIET UNION CASE STUDY41
5	OPPORTUNITY COSTS AND CONCLUSION
	BIBLIOGRAPHY70
	Illustrations
Table	
1	Sino-American Incidents Fostering Adversarial Perceptions
Figure	
1	US and Chinese GDP Trends
2	Current Military Hardware Comparison
3	The Counterproductive Cycle of Feeding a Dragon
4	US/Soviet Military Expenditure, 1987-1989

#### Introduction

Disintegrated grand strategies, in which political objectives and military doctrine are poorly reconciled, can lead to both war and defeat—jeopardizing the state's survival. In time of peace, a military doctrine should allow the state to ensure its security at economic, political, and human costs that it can afford.

Barry Posen

The United States is currently renewing strategic emphasis on the Asia-Pacific region. With this evolution of national interests, strategy and subsequent military requirements must adapt. In context, the pivot of priority to the Asia-Pacific region occurs as the United States experiences relative economic decline. The American economy is in recession, and has been since 2008. The military, like all government organizations, faces necessary reductions in light of the economic reality. On the other hand, China currently benefits from impressive growth in economic and military capabilities. As the United States shifts international prioritization to Asia, the nation experiences relative decline in comparison to a rising China. America must maintain protection of its interests in the region with a judicious cognizance of economic reality. In short, the United States must balance military access to Asia in a manner that does not cause national economic overextension.

Military access to the Asia-Pacific is increasingly expensive. Although the United States military remains globally dominant, asymmetric strategies mitigate its effectiveness. The People's Republic of China (PRC) does not currently possess sufficient military capability to defeat the United States conventionally. However, the PRC does maintain asymmetric capabilities sufficient to deny or disrupt the effectiveness of a superior American military force. Of note, the PRC's asymmetric capabilities are considerably more inexpensive than conventional military might. The United States must therefore spend disproportionately to maintain military access to the Asia-Pacific region. Considering economic context, this scenario logically amplifies both the relative decline of the United States and rise of China. Such implications merit candid analysis. Is military access to the Asia-Pacific region economically sustainable? Considering China's

asymmetric military capabilities, will the United States ironically overextend itself when seeking protection of its interest in the region?

The global political economy further complicates the scenario. The United States and the PRC engage in a mutually beneficial yet vulnerable economic relationship of complex interdependence. Viewing the Sino-American relationship solely through a military lens places economic benefits at risk. Furthermore, since the PRC invests heavily in American debt, how does investing in military technologies for access in Asia increase American debt and subsequent Chinese economic growth? Economic growth implies fungible improvements in military capability. Due to its favorable economic situation, the PRC is increasingly upgrading military investment. These enhancements further challenge American access to the region. Ironically, American investment of military capabilities to ensure access in the region is indirectly funding the PRC's increasing capabilities to deny that access. Does this scenario place the United States in a worsening downward economic spiral counterproductive to its interests? If so, what are the opportunity costs to the United States military and nation as a whole?

American prioritization of the Asia-Pacific region presents challenges to the nation's grand strategy. In a period of relative decline requiring fiscal prudence, the United States must sagely adapt strategy. Protecting interests in the region is a complex endeavor; accordingly, America must not view access solely in terms of relative military capability. Due to its complex economic interdependence with China, overemphasis upon the military instrument of power in Asia could ironically be counterproductive to national interests. This purpose of this investigation is to understand holistic American ramifications of seeking military access in a region increasingly denied by asymmetric capabilities. This effort cannot definitively predict economic collapse or recommend the most judicious strategy in the region. Nonetheless, it will provide issues of consideration as the United States military and whole of government pivot priority and refine strategy in the Asia-Pacific region.

To analyze this scenario and its implications, I will examine five main topics, each with a respective chapter. The first chapter highlights the regional perspectives and interests of both the United States and China. In addition to interests, this chapter examines key aspects of the international context. Theories on power transition,

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economic integration, the security dilemma, and perception provide tremendous insight into American and Chinese interaction. Furthermore, these theories illustrate the potential for miscalculation and counterproductive strategies by both nations. Policy makers and military strategists benefit from awareness of such theoretical context and implications when refining strategy.

The second chapter analyzes the contemporary economic environment and contrasts the economic trends of the United States and China. Fiscal realities for the respective states are incongruent. As such, any strategy emphasizing the Asia-Pacific reality must account for relative economic trends. Most importantly, Chapter 2 highlights the complex economic interdependence between the United States and China and fungible transference toward military capability. In seeking military access to the region, the United States may unintentionally improve China's economic and military power. Such counterproductive implications merit considerable attention.

The analysis in the third chapter illustrates how the negative implications of this scenario compound through asymmetric military capabilities and strategy. The Chinese military is relatively inferior to that of the United States. However, the People's Liberation Army (PLA) sagely mitigates conventional superiority through asymmetric strategy and capabilities. In short, the PLA must spend relatively little to disrupt or deny a vastly more expensive American force. Logically, the United States will further invest to ensure the effectiveness of its advanced and expensive military force. Considering the overall economic context, asymmetric strategies could increasingly benefit the Chinese economy and degrade that of the United States. China, moreover, is not the only competitor or potential adversary employing asymmetric advantages against the United States military. The global aggregate of asymmetric maneuvering confronts the United States with a potentially unsustainable challenge to its economy.

Great powers generally decline with time. Could the contemporary scenario catalyze American decline? Will increasingly expensive military requirements for global interests promote unsustainable economic overextension? The Soviet Union, for example declined in global influence partly from economic collapse due to military expenditure. The fourth chapter compares and contrasts contextual similarities between contemporary United States and the declining Soviet Union of the Cold War. Although no case study

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provides precise replication of contemporary phenomena, the United States must heed similar lessons from the Soviet case study when implementing revised strategy in the Asia-Pacific region.

If the United States is in fact susceptible to economic overextension due to unsustainable military expenditure for interests in Asia, the implications are critical. Thus, the final chapter highlights such potential implications in terms of opportunity cost and the international order. First, resources increasingly spent to maintain military access in Asia do not contribute to long-term domestic and economic improvements. Second, military prioritization of access in Asia comes at the expense of other global missions. What will the United States military be unable to accomplish in the complex global environment? Of even greater significance, economic collapse could lead to a modified world order. Can American economic overextension in the short term necessitate retrenchment? Does this imply limitations to regional influence or possible return to global bipolarity?

An admitted limitation of this research is that it is not prescriptive to the recommended solution or appropriate balance the United States military or whole of government should seek in the region. The United States must safeguard interests in Asia; however, the manner in which this is accomplished must consider economic implications for the long term. Interests in the Asia-Pacific region must be guarded with the awareness an unbalanced military solution could in fact facilitate both America's decline and China's rise. Such developments could undermine America's long-term global interests, and they warrant careful consideration now.

# Chapter 1

# **Regional Interests and Theoretical Background**

A State which expends its strength to the point of exhaustion bankrupts its own policy, and future.

B.H. Liddell Hart

#### Overextension

If history can provide one absolute, it is that all great powers eventually decline. Joseph Nye noted, "Great empires and great civilizations have a way of cresting that is pretty well set in historical stone." Decline is unintentional, as no self-interested, rational entity would willfully diminish its power and influence. Therefore, one must conclude great powers are not fully cognizant of policy and strategy decisions which contribute to their relative decline. This proposition is disturbing and perhaps cognitively dissonant to the United States which currently enjoys the benefits of global hegemony. Great power decline is analogous to death; it is inevitable, yet ignored or denied until its arrival. In order to delay or mitigate eventual decline, the United States must examine causal factors of such decline.

The difficulty of preventing decline is that decline has no single causal variable. If one could reduce the dissipation of hegemonic power to a single deterministic factor, great powers would seek to control it to indefinitely maintain the status quo in their interest. Robert Kagan opined, "Great powers rarely decline suddenly. A war may bring them down, but even that is usually a symptom, and a culmination, of a longer process." B.H. Liddel Hart suggested collapse occurs "not from the direct assaults of foes but from internal decay, combined with the consequences of exhaustion in war." Other variables

<sup>&</sup>lt;sup>1</sup> Joseph S. Nye, *The Future of Power* (New York: Public Affairs, 2011), 158.

<sup>&</sup>lt;sup>2</sup> Robert Kagan, "Not Fade Away: Against the Myth of American Decline," *The New Republic* Volume 243, Issue 1, February 2012. http://www.brookings.edu/opinions/2012/0117\_us\_power\_kagan.aspx (accessed 2 May 2012).

<sup>&</sup>lt;sup>3</sup> B.H. Liddell Hart, *Strategy*, 2<sup>nd</sup> rev. ed. (New York: Plume, 1991). 359.

#### AU/SAASS/HAGAN/AY12

include the relative rise of other nations and simple overstretch of interests.<sup>4</sup> An aggregate combination of such variables insidiously degrades the status of great powers, and countering the seemingly imperceptible causes of this phenomenon illustrates the complex challenge of maintaining the status quo.

As a contemporary hegemon, the United States must judiciously examine the deceptive variables of decline. Most notably, overextension represents a declination variable resonant with contemporary reality. With increased power comes increased interests, and as hegemonic America has global interests, some combination of military, economic, and diplomatic power promotes these interests. Furthermore, America disproportionately provides security in order to maintain a global order perceived beneficial to its interests. The cost of hegemony is increased global responsibility, and this responsibility is conducive to overextension if not exercised judiciously.

As noted, one does not desire overextension; however, one does not realize when it is about to occur. To overextend is "to extend or expand beyond a safe or reasonable point; to commit (oneself) financially beyond what can be paid." In a period of economic recession, the potential of overextension increases. The current *National Security Strategy* identifies this risk: "Our adversaries would like to see America sap our strength by overextending our power." As the United States transitions to an emphasis of interests in the Asia-Pacific region, it must do so with an awareness of the possibilities of overextension.

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<sup>&</sup>lt;sup>4</sup> Joseph S. Nye, *The Future of Power*,156. Thucydides illustrated the insidious danger of great power overextension with the failed Athenian expedition to Sicily. To justify Athenian invasion, Alcibiades argued, "Moreover, we cannot fix the exact point at which our empire shall stop; we have reached a position in which we must not be content with retaining what we have but must scheme to extend it for, if we cease to rule others, we shall be in danger of being ruled ourselves." The "total destruction" of Athenian overextension in the Sicilian campaign was "most calamitous" to its strategic interests. Robert B. Strassler, ed., *The Landmark Thucydides: A Comprehensive Guide to the Peloponnesian War*, Revised ed. (New York: Free Press, 2008), 372, 478.

<sup>&</sup>lt;sup>5</sup> Merriam-Webster, *Merriam-Webster's Collegiate Dictionary.*, 11th ed. (New York: Merriam Webster, 2003), 884.

<sup>&</sup>lt;sup>6</sup> President. National Security Strategy, May 2010. Introduction letter.

# **US Interests in the Asia-Pacific Region**

The Nation's strategic priorities and interests will increasingly emanate from the Asia-Pacific region.

National Military Strategy, 2011

The prominent interest of the United States is the vitality of its economy. Currently, the dynamic and prospering Asia-Pacific region provides a crucial venue of economic recovery and vitality for the United States. The *National Security Strategy* (NSS) prioritizes economic renewal as "the wellspring of American power." Economic strength is crucial as it transfers directly into diplomatic and military power. During the Cold War, President Dwight Eisenhower perceptively understood military power roots itself in the strength of the American economy. During the contemporarily strained fiscal reality, the United States wisely prioritizes economic renewal. The NSS further identifies a prosperous economy as the "foundation of American leadership" and declares a "growing US economy" as the nation's second security priority. Without access to the Asia-Pacific region, the renewal of the US economy, and subsequent international power, is unlikely to occur.

The US seeks to maintain hegemonic preeminence in the international order; however, influence relatively declines due to rising economic powers. In the critical Asia-Pacific region, the phenomenal economic growth of China challenges American influence and interests. The NSS confidently predicts "going forward, there should be no doubt: the United States of America will continue to underwrite global security." Nonetheless, the nation realizes accommodation for a rising China is essential and seeks "a positive, cooperative, and comprehensive relationship with China that welcomes it to

<sup>&</sup>lt;sup>7</sup> Former Chairman of the Joint Chiefs of Staff Admiral Mike Mullen asserted that the "single, biggest threat to our national security is our debt." Quoted in "Debt is Biggest Threat to National Security, Chairman Says" Armed Forces Press Service. September 22, 2011.

http://www.defense.gov/news/newsarticle.aspx?id=65432 (accessed 2 May 2012).

<sup>&</sup>lt;sup>8</sup> President, *National Security Strategy*, 2.

<sup>&</sup>lt;sup>9</sup> Joseph S. Nye, *The Future of Power*, 229.

<sup>&</sup>lt;sup>10</sup> President, National Security Strategy, 7, 28.

<sup>&</sup>lt;sup>11</sup> President, *National Security Strategy*, 1.

take on a responsible leadership role." Furthermore, US and PRC heads of state acknowledge that a "positive, cooperative, and comprehensive US China relationship" is mutually beneficial. <sup>13</sup> Economic maladies and an increasingly wealthy and influential China challenge American interests regarding hegemony, at least in the Asia-Pacific region. Judicious maintenance of these dynamics is essential for American interests in the region.

Maintenance of the Sino-American relationship, whether increasingly cooperative or adversarial, resides in the domain of civilian policy makers. Although cooperation is ideal and preferred, competing interests as relative power alters provide increased opportunities for friction. During the 2012 State of the Union, President Barack Obama publicly criticized China for suspect trade and copyright piracy practices, and he announced a Trade Enforcement Unit for investigation. Although China and the United States mutually gain in interests from cooperation, the relationship, like any, will continue to provide sources of contention. As such, the American military must prepare for the worst-case scenario, the increasingly formidable military of the PRC. As this occurs during a recession, the nation must balance the need for this military capability with the competing reality that economic renewal is a crucial national priority.

Following over a decade of sustained counterinsurgency (COIN) operations, the military now seeks to obtain "capabilities needed for a wider spectrum of missions and adversaries." Military reemphasis on neglected capabilities occurs within the constraints of the 2011 Budget Control Act, which requires the DoD to reduce expenditures of \$487 billion over the next decade, or \$259 billion within five years. The *Defense Budget and Priorities*, released in January 2012, is cognizant of both requisite military adaptations for national interests and acceptable risks to other missions due to a decreasing budget. Chapter Five will address such opportunity costs.

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<sup>&</sup>lt;sup>12</sup> Chairman of the Joint Chiefs of Staff. *National Military Strategy of the United States of America: Redefining America's Leadership*, 14.

<sup>&</sup>lt;sup>13</sup> Secretary of Defense, Annual Report To Congress: Military and Security Developments Involving the People's Republic of China 2011, 53.

<sup>&</sup>lt;sup>14</sup> President, State of the Union Address, 2012.

http://www.csmonitor.com/USA/Elections/2012/0124/Transcript-of-the-State-of-the-Union/(page)/3 (accessed 2 May 2012).

<sup>&</sup>lt;sup>15</sup> Department of Defense, *Defense Budget Priorities and Choices*, January 2012, 2.

<sup>&</sup>lt;sup>16</sup> Department of Defense, *Defense Budget Priorities and Choices*, January 2012, 1.

Nonetheless, it is clear the military is attempting to prepare for access in the Asia-Pacific region in accordance with national objectives. Clearly stated, since the "U.S. military will continue to contribute to security globally, we will of necessity rebalance toward the Asia-Pacific region."<sup>17</sup>

With prioritization of the region, the United States military must plan toward the capabilities of the dominant regional power, China. As noted, the PRC currently pursues a military strategy rooted in asymmetric advantages and area denial. Such capabilities threaten not only American interests, but also the security of regional "allies and partners," which is a key consideration of the NSS. 18 Subsequently, a renewed emphasis upon the Asia-Pacific region dictates American military capabilities able to counter such strategy. The current NMS notes states are increasing their area-denial and anti-access capabilities, and this naturally confounds the American military's effort to ensure "access and freedom of maneuver within the global commons." <sup>19</sup> The Quadrennial Defense Review promotes a requisite mission rebalance to "deter and defeat aggression in antiaccess environments" and "operate effectively in cyberspace." With confined budgets, a "globally networked approach to deterrence and warfare" is essential to counter access challenges in Asia. 21 Subsequent platform funding will include a new bomber, increased cruise missile capacity, improved air-to-air missiles, and conventional strike options for submarines.<sup>22</sup> In general, national guidance emphasizes the value of access to the Asia-Pacific region, and the military is adapting to the regional priority and challenges. Recent guidance implies this pivot is occurring with judicious awareness of economic realities and assumed risk to other missions.

### **Chinese Perspective**

The progress toward economic globalization and a multi-polar world is irreversible, as is the advance toward informationization of society.

<sup>&</sup>lt;sup>17</sup> Department of Defense, Sustaining U.S. Global Leadership: Priorities for 21<sup>st</sup> Century Defense, January 2012, 2.

<sup>&</sup>lt;sup>18</sup> President, *National Security Strategy*, 7.

<sup>&</sup>lt;sup>19</sup> Chairman of the Joint Chiefs of Staff. *National Military Strategy of the United States of America: Redefining America's Leadership*, 3.

<sup>&</sup>lt;sup>20</sup> Department of Defense, *Quadrennial Defense Review Report*, February 2010, 2.

<sup>&</sup>lt;sup>21</sup> Department of Defense, Sustaining U.S. Global Leadership: Priorities for 21<sup>st</sup> Century Defense, 7.

<sup>&</sup>lt;sup>22</sup> Department of Defense, *Defense Budget Priorities and Choices*, 5.

China, like every rational state, pursues policies that advance its national interests. The PRC's phenomenal economic growth and subsequent improvements in military capability concern other nations, primarily the dominant US hegemon. The relative rise of China is seemingly easier to achieve than the maintenance of global hegemony. Therefore, China strategically attempts to maintain its impressive national advance in a manner not threatening to the United States. One method of peaceful rise is the mutually beneficial, "highly interdependent economic relationship with the US." Another method is an explicit strategic communication campaign emphasizing limited global ambition and a defensive mentality.

The Chinese defense community emphasizes non-threatening, cooperative, and defensive goals. Explicitly, China's defense policy is "defensive in nature." To a concerned American audience, the PRC assures, "China will never seek hegemony, nor will it adopt the approach of military expansion now or in the future, no matter how its economy develops." The PRC emphasizes security aims in an "environment of peace, stability, equality, mutual trust, cooperation and win-win." Internationally, the PLA increasingly employs soft power through cooperative venues such as disaster relief. For example, China advertised the "PLA had 1,955 officers and men serving in nine UN mission areas" which in 2010 was more "than any other permanent member of the UN Security Council." The PRC is currently assuaging concern of rapid economic and military growth with strategically benign messaging. Pragmatically, China is "carefully calibrating its behavior so as to avoid provoking" the United States. <sup>28</sup>

With the exception of "maintaining social harmony and stability," the defense goals in *China's National Defense in 2010* are similar to overarching themes found in

<sup>23</sup> Patrick M. Morgan and T.V. Paul, "Deterrence among Great Powers in an Era of Globalization," In *Complex Deterrence: Strategy in the Global Age* ed T.V. Paul et al., (New York: University of Chicago Press, 2009). 271.

<sup>&</sup>lt;sup>24</sup> Information Office of the State Council of the People's Republic of China. *China's National Defense in 2010.* March 2011. Section 1. http://www.china.org.cn/government/whitepaper/node\_7114675.htm (accessed 2 May 2012).

<sup>&</sup>lt;sup>25</sup> Information Office of the State Council of the People's Republic of China, Section 1.

<sup>&</sup>lt;sup>26</sup> Information Office of the State Council of the People's Republic of China, Section 1.

<sup>&</sup>lt;sup>27</sup> Information Office of the State Council of the People's Republic of China, Section 4.

<sup>&</sup>lt;sup>28</sup> Patrick M. Morgan and T.V. Paul, "Deterrence among Great Powers in an Era of Globalization," 270.

America's *National Security Strategy* (NSS), *National Military Strategy* (NMS), or *National Defense Strategy* (NDS). The PLA also strives to safeguard sovereignty, security and interests, modernize armed forces, and maintain world peace and stability. Regarding sovereignty, the PRC aspires for a peaceful "ultimate reunification in the course of the great rejuvenation of the Chinese nation." The PLA's modernization could thus prevent Taiwanese bids for independence or American support of Taiwan in the event of hostilities. Furthermore, the PLA's goal of defending interests include increasingly aggressive support for maritime claims in the South China Sea, an issue confrontational to American allies and interests involving \$1.2 billion in trade. Although generic, stated goals of the PLA imply potential sources of conflict with an America currently reprioritizing the Asia-Pacific region.

As power grows, so do interests. This is as true for China as it is the United States. Richard Clarke states "rapid economic growth and dependence upon global resources" will catalyze the PLA's increasing preparation for possible military conflict. China sees the United States and other major powers increasing military capability, bolstering alliances, and devising pro-Western strategies in the Asia-Pacific region. 34 Although both the United States and China aspire to a cooperative, peaceful relationship, American actions can appear threatening to China. With awareness that conventional confrontation is not preferable, the PRC hedges against American capabilities with a medley of asymmetric tools designed to "deceive and exhaust American systems." Chapter 3 delves into numerous examples of this strategy. As China's capacity and interests grow simultaneously with American renewed interest in the Asia-Pacific region, an uncertain future of conflict and/or cooperation prevails. A review of international theory provides insight as to how the Sino-American relationship could, or arguably should, develop.

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<sup>&</sup>lt;sup>29</sup> Information Office of the State Council of the People's Republic of China. Section 2.

<sup>&</sup>lt;sup>30</sup> Information Office of the State Council of the People's Republic of China. Section 2.

<sup>&</sup>lt;sup>31</sup> Patrick M. Morgan and T.V. Paul, "Deterrence among Great Powers in an Era of Globalization," 269.

<sup>&</sup>lt;sup>32</sup> David Nakamura, "Global Security Trumps Economics at APEC," *Washington Post.* 14 November 2011. A10.

<sup>&</sup>lt;sup>33</sup> Richard A. Clarke and Robert K. Knake, *Cyber War: the Next Threat to National Security and What to Do About It* (New York: Ecco, 2010), 51.

<sup>&</sup>lt;sup>34</sup> Information Office of the State Council of the People's Republic of China, Section 1.

<sup>&</sup>lt;sup>35</sup> Joseph S. Nye, *The Future of Power*, 34.

## **Theoretical Background**

A century ago, Britain managed the rise of American power without conflict, but the world's failure to manage the rise of German power led to two devastating world wars.

Joseph Nye

Theory, at its core, assists humankind in understanding its environment. Of note, the international environment is extremely complicated, making an accurate, general theory nearly impossible. International theories offer perspectives that may partially explain specific phenomena, but neglect the significance of other variables. Furthermore, adherence to any one theory will cognitively constrain policy makers or military leaders toward expected courses of action or outcomes. As America experiences relative decline, insight into various theories will provide policy makers awareness of potential advantages and shortfalls while refining strategy. Theories of power transition, economic integration, the security dilemma, and misperception provide tremendous, although divergent, insight into America's contemporary context and possible strategies.

First, power transition between great powers requires objective analysis.

Obviously, a hegemonic power seeks to maintain its position, while competitive powers yearn to advance their interests. Historically, maintenance or transition of hegemony can occur with or without violence. Disparate expectations of either a peaceful or a belligerent transition of power will tremendously alter national strategies. Therefore, holistic awareness of possibilities during periods of potential transition is essential in order to shape an international strategy most beneficial to a state's interests.

The theoretical perspectives of Robert Gilpin offer much insight into the contextual US-Sino relationship. <sup>36</sup> For a variety of reasons, the hegemonic costs of maintaining the status quo rise disproportionately to the state's capacity to finance

<sup>&</sup>lt;sup>36</sup> This investigation thoroughly reviewed multiple theories regarding international relations. In context, the work of Robert Gilpin proves most applicable toward hegemonic decline. Therefore, his theories initially receive disproportionate reference in this chapter. This does not imply endorsement of hegemonic war perspectives.

equilibrium.<sup>37</sup> Subsequently, the hegemon declines in capacity to influence others or protect international interests. <sup>38</sup> Since the costs of maintaining equilibrium reside increasingly and disproportionately on the hegemon's shoulders, challenging the hegemon's dominance is theoretically less expensive and strenuous. Eventually, the international system evolves to "the replacement of a declining dominant power by a rising dominant power."39 Nonetheless, the hegemon attempts to maintain power through more efficient strategies.

Gilpin provides three notable options for the declining hegemon. First, the "most attractive response...is to eliminate the source of the problem."<sup>40</sup> This essentially entails preemptive war while the hegemon still possesses the military advantage. 41 Second, the hegemon may ironically expand, albeit to more defensible positions, although this can lead to further overextension. 42 Perhaps this scenario is evident in the Asia-Pacific region with American military expansion into Australia. Finally, the hegemon may attempt to reduce costs of systemic maintenance with a reduction in foreign policy commitments. 43 Such retrenchment occurs via "unilateral abandonment of commitments" or alliances with less threatening powers. 44 The United States' emphasis on the Asia-Pacific region indicates abandonment is not an option, while engagement with traditional and new regional allies suggests a strategy of alliances to mitigate costs of maintaining the status quo. In fact, the QDR asserts the United States will remain internationally dominant, but "must increasingly work with key allies and partners if it is to sustain stability and peace."45

American strategists who have never known any situation other than hegemony must be cautiously aware of Gilpin's theory that a declining hegemon prefers war. Barry Posen amplifies this perspective: "states with a favorable power position that is suffering

<sup>&</sup>lt;sup>37</sup> Robert Gilpin, War and Change in World Politics, (New York: Cambridge University Press, 1983), 156.

<sup>&</sup>lt;sup>38</sup> Robert Gilpin, War and Change in World Politics, 33.

<sup>&</sup>lt;sup>39</sup> Robert Gilpin, War and Change in World Politics, 43.

<sup>&</sup>lt;sup>40</sup> Robert Gilpin, War and Change in World Politics, 191.

<sup>&</sup>lt;sup>41</sup> Robert Gilpin, War and Change in World Politics, 191.

<sup>&</sup>lt;sup>42</sup> Robert Gilpin, War and Change in World Politics, 192.

<sup>&</sup>lt;sup>43</sup> Robert Gilpin, War and Change in World Politics, 192.

<sup>&</sup>lt;sup>44</sup> Robert Gilpin, War and Change in World Politics, 192.

<sup>&</sup>lt;sup>45</sup> Department of Defense, *Quadrennial Defense Review Report*, February 2010, III.

erosion prefer offensive doctrines."<sup>46</sup> Hubris, interests, or perceptions of prestige must overshadow the consequences of hegemonic war. According to Gilpin, hegemonic war with consequences of dominance in the international order will be exceptionally brutal. Such war provides few limitations in means or violence.<sup>47</sup> Strategists must understand both the tendency and consequence of transitory hegemonic war in the contemporary context.

Brutal, inevitable war is not the only possible outcome for transition theorists. Robert Keohane opines that hegemonic war is no longer rational in the nuclear age as the costs are "more catastrophic." By this logic, hegemonic war provides existential risk to both the rising and challenging state and is not worth the cost. In the absence of a global hegemon, international institutions and regimes should provide requisite venues of cooperation. Of note, the United States largely molded international regimes to support its interests and China increasingly engages in these venues. In theory, international regimes provide venues for states to advance both common interests and state interests in an anarchic world order. As war in the nuclear era is too costly for great powers in transition, Keohane's notion of regimes suggest international interests are achievable peacefully, even without a standing hegemon.

Likewise, Joseph Nye refutes the implied requisite of war during hegemonic transition. Hegemonic struggles unnecessarily root with "fears of ultimate decline and perceived erosion of power." With an optimistic view, perspectives such as Gilpin's represent a "fuzzy hegemonic transition theory" that should not "justify alarmist predictions of a coming war." In fact, the "current international order has the openness, economic integration and capacity to absorb China rather than be replaced by a Chinese led order." Rather than reacting with fear or aggressive preparation for war, Nye suggests the United States should further incorporate China into the international system

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<sup>&</sup>lt;sup>46</sup> Barry R. Posen, *The Sources of Military Doctrine: France, Britain, and Germany Between the World Wars (Cornell Studies in Security Affairs)*(New York: Cornell University Press, 1986), 78.

<sup>&</sup>lt;sup>47</sup> Robert Gilpin, War and Change in World Politics, 200.

<sup>&</sup>lt;sup>48</sup> Robert O. Keohane and with a new preface by the author, *After Hegemony: Cooperation and Discord in the World Political Economy*, 1st Princeton classic ed. (New York: Princeton University Press, 2005), 244.

<sup>&</sup>lt;sup>49</sup> Robert O. Keohane, *After Hegemony*, 244.

<sup>&</sup>lt;sup>50</sup> Robert O. Keohane, After Hegemony, 245.

<sup>&</sup>lt;sup>51</sup> Joseph S. Nye, *The Future of Power*, 153

<sup>&</sup>lt;sup>52</sup> Joseph S. Nye, *The Future of Power*, 181.

<sup>&</sup>lt;sup>53</sup> Joseph S. Nye, *The Future of Power*, 181.

while judiciously enhancing regional relationships as a hedge against aggression.<sup>54</sup> Furthermore, Nye advocates a *smart* power strategy attractive to the interests of international community as a means to remain influential.<sup>55</sup> Nye's perspective implies military conflict is neither necessary nor advisable, but possible with poor policy rooted in fear and overreaction to America's relative decline.

In the complex milieu of international relations, hegemonic transition perspectives do not provide the only lens of viewing Sino-American interaction. In the globalized world, economic interests of the United States and China are somewhat symbiotic. Since economic renewal marks the primary interest of the United States, prosperity inherent within the Chinese relationship is logically essential. Prosperous American multinational corporations (MNCs) increasingly rely upon Chinese labor and production. Walmart, for example, imports approximately 70 percent of its goods from China. This is a critical figure for an MNC with \$443.9 billion of net sales in 2011. Logically, such corporate giants would not benefit from military conflict between the states. Likewise, social stability, popular employment, and economic growth in China rely upon American markets. Optimistically, economic interdependence promotes the cliché that *those who trade do not invade*. Assuming rational leadership, states engaged in mutually beneficial economic relationships will avoid military conflict. Pessimists note the vulnerabilities of globalization did not prevent the actors of World War I from brutal

<sup>&</sup>lt;sup>54</sup> Joseph S. Nye, *The Future of Power*, 233.

<sup>&</sup>lt;sup>55</sup> Joseph S. Nye, *The Future of Power*, 220.

<sup>&</sup>lt;sup>56</sup> Palavi Golgoi, "Wal-Mart's China Card." *Business Week* 26 July 2005. http://www.businessweek.com/bwdaily/dnflash/jul2005/nf20050726\_3613\_db016.htm (accessed 2 May 2012).

<sup>&</sup>lt;sup>57</sup> Walmart. *Walmart 2012 Annual Report*. 2012. 2. http://www.walmartstores.com/sites/annual-report/2012/WalMart\_AR.pdf (accessed 2 May 2012).

<sup>&</sup>lt;sup>58</sup> Larry Hlobik, former CEO of MNC Agribusiness, the J.R. Simplot Company, estimates China accounts for \$3-6 billion of annual US fertilizer sales. MNCs which economically benefit from China lobby for positive relations between the states to protect economic interests. Cessation of US-Sino commerce would bring the holistic operation of the US economy to a "screeching halt." Unintended consequences transcend business interests, and would immediately affect the populace with unemployment, transportation strains, and rising cost of consumer products to include food. Writ large, cessation of commerce with China would catastrophically alter the daily way of domestic life. Interview by author, 23 April 2012.

<sup>&</sup>lt;sup>59</sup> Commercial pacifists such as Adam Smith suggest market societies are fundamentally against war as aggressive conflict is counterproductive to economic gains. Michael W. Doyle, *Ways of War and Peace*, (New York: W.W. Norton & Co, 1997), 230, 241.

<sup>&</sup>lt;sup>60</sup> Havard Hegre, John Oneal, and Bruce Russett, "Trade Does Promote Peace: New Simultaneous Estimates of the Reciprocal Effects of Trade and Conflict," 25August 2009, http://www.yale.edu/leitner/resources/docs/HORJune09.pdf (accessed 2 May 2012).

conflict. Nonetheless, economic entanglement and interdependence form a crucial portion of the Sino-American relationship and respective interests.

In general, military conflict is not in the interests of states mutually benefitting from economic integration. If states desire to "retain or deepen their economic relationships," as China and the United States clearly do, they "find it difficult to threaten each other with military forces." China understands this relationship, and pursues a strategy of peaceful growth reliant upon economic integration with the United States. Furthermore, the United States increasingly offers China influence in the global economic order with an eye on long-term cooperation. Economic prosperity rooted in interdependence is a critical variable of consideration as the United States emphasizes interest in the Asia-Pacific region.

Economic integration provides China and the United States positive incentives for long-term cooperation. Although counterintuitive, thermonuclear weapons indirectly also catalyze cooperation. Historic examples of great hegemonic wars occurred prior to the nuclear era. To date, there have been no incidents of war between great powers with nuclear weapons. Nuclear weapons do not eradicate disagreements and conflict, and indeed the Cold War presented numerous examples of military confrontation via proxy wars. This is not necessarily deterministic that conventional conflict will never occur between nuclear powers; however, the costs of nuclear war to date exceed the benefits of war between nuclear powers.

With approximately 240 nuclear warheads and 66 ICBMs, China maintains an adequate nuclear arsenal to existentially threaten and deter the United States.<sup>64</sup> The United States maintains a significantly more robust nuclear capability. States judiciously maintain nuclear weapons as a "hedge against the possible reappearance of great-power threats and arms racing."<sup>65</sup> American and Chinese policy makers must not permit minor improvements in the PRC's conventional and asymmetric military capabilities to

<sup>&</sup>lt;sup>61</sup> T.V. Paul, "Complex Deterrence: An Introduction," In *Complex Deterrence: Strategy in the Global Age* ed T.V. Paul et al (New York: University of Chicago Press, 2009). 18.

<sup>&</sup>lt;sup>62</sup> Patrick M. Morgan and T.V. Paul, "Deterrence among Great Powers in an Era of Globalization," In *Complex Deterrence: Strategy in the Global Age.* 271.

 <sup>&</sup>lt;sup>63</sup> Patrick M. Morgan and T.V. Paul, "Deterrence among Great Powers in an Era of Globalization," 271.
 <sup>64</sup> Jane's Nuclear, Biological Chemical Defence 2010-2011, 23 ed. (Surrey, UK: Janes Information Group, 2010), 35. And IISS, *The Military Balance 2011*, Pap/Chrt ed. (London: Routledge, 2011), 34.

<sup>&</sup>lt;sup>65</sup> Patrick M. Morgan and T.V. Paul, "Deterrence among Great Powers in an Era of Globalization," 264.

overshadow thermonuclear reality. Perhaps the global norm of nuclear non-use for nearly 70 years prevents adequate appreciation of nuclear implications. Nonetheless, as the PLA increases conventional capability and the United States renews interest in the Asia-Pacific region, both states are influenced by the nuclear Sword of Damocles loitering overhead.

Understanding Chinese and American relations requires awareness and appreciation of the security dilemma. In a self-help, anarchic international arena, "security is the highest end." Logically, whatever means increase the security of one state contrarily decrease the security of another. A state views improvements to its security as legitimate and benign; however, an adversary perceives those actions as unnecessary and hostile. Military insurance for one state represents threatening encirclement to another. States which are perceptibly threatened by the military capabilities of others "react quite strongly" and respond with appropriate military preparation. Those preparations subsequently confirm the security fears for the original state acting out of an altruistic sense of self-defense. Thus, both states acting upon security interests cyclically provoke each other into further insecurity and incessant arms races.

A mismanaged Sino-American relationship provides a fertile environment for the security dilemma. As the United States prioritizes access to the Asia-Pacific region, China feels threatened in its own theater. Concepts such as Air-Sea Battle ensure American access, but logically incite Chinese defensive preparations. China currently possesses economic capacity to invest in military capabilities it increasingly views as necessary for its defense. By logic of the security dilemma, these preparations confirm intent to deny American access, which will increase the threat to American interests and subsequent response. Initiation of the security dilemma is irrelevant, but subjectively the fault of the other nation. The more beneficial perspective for each state is realization that the security dilemma cycle has begun. Although either state would be foolish to not

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<sup>&</sup>lt;sup>66</sup> Kenneth N. Waltz, *Theory of International Politics* (Long Grove, IL: Waveland Pr Inc, 2010), 126.

<sup>&</sup>lt;sup>67</sup> Michael Sheehan, *The International Politics of Space* (New York: Routledge, 2007), 7.

<sup>&</sup>lt;sup>68</sup> Barry R. Posen, *The Sources of Military Doctrine*, 17.

<sup>&</sup>lt;sup>69</sup> Barry R. Posen, *The Sources of Military Doctrine*, 18.

<sup>&</sup>lt;sup>70</sup> Joseph S. Nye, *The Future of Power*, 179.

prepare against capabilities of a competitor, the security dilemma illustrates the potential for a costly, counterproductive relationship rooted in misperception and fear as opposed to actual intent.

Perception is often reality. Unfortunately, in international relations a state does not know the perception or intent of another. Although a state may easily discern the military capabilities of another, the rationale or intent of such preparation is not so clear. For the United States, China's increase in military capability incites "legitimate questions about its future conduct and intentions within Asia and beyond." Furthermore, uncertainty promotes fear, as the PRC's improved military "might be employed preemptively in the name of defense." From the other perspective, China sees the United States "reinforcing its regional military alliances, and increasing its involvement in regional security affairs" with "new and more sophisticated military technologies." Military capabilities promote fear, but intentions imply threat (or not). Respective fears of military capability suggest China and the United States could negatively engage in a security dilemma contrary to the national interests of each. A more beneficial relationship could emerge with transparency of intentions as opposed to increasing fear of military capabilities.

A broad appreciation of international relations theory informs the complex relationship of the United States and China. Diverse theoretical perspectives inform both challenges and opportunities inherent within the relationship. Relative rise and decline is but one variable of the dynamic. The United States must also inform its rebalanced Asia-Pacific strategy with cognizance of overextension, economic interdependence, and the security dilemma. A myopic, adversarial perception of the relationship will undoubtedly challenge the potential for long-term cooperation and mutual gain. This is evident with further analysis of the US-Sino economic symbiosis.

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<sup>&</sup>lt;sup>71</sup> Robert Jervis, *Perception and Misperception in International Politics* (IL: Princeton University Press, 1976), 113.

<sup>&</sup>lt;sup>72</sup> Barry R. Posen, *The Sources of Military Doctrine*, 16.

<sup>&</sup>lt;sup>73</sup> Department of Defense, *Quadrennial Defense Review Report*, February 2010, 60.

<sup>&</sup>lt;sup>74</sup> Secretary of Defense, Annual Report To Congress: Military and Security Developments Involving the People's Republic of China 2011, 25.

<sup>&</sup>lt;sup>75</sup> Information Office of the State Council of the People's Republic of China, Section 1.

<sup>&</sup>lt;sup>76</sup> Michael Walzer, *Just and Unjust Wars: a Moral Argument with Historical Illustrations*, 4th ed. (IL: Basic Books, 2006), 78.

# Chapter 2

#### **Economic Context**

The United States will remain the foremost economic and military power for the foreseeable future, though national debt poses a significant national security risk. Asia will increase its regional share of global wealth.

The National Military Strategy

Economic growth trends currently favor China over the United States. Economic analysis is critical, as wealth is fungible toward military capacity, prestige, and ultimately international influence. Writ large, wealth underwrites both hard and soft power critical to advancing a nation's interests in the international arena. The interdependent economic relationship of the US and PRC informs each state's power and influence, and each state is entangled in the other's prosperity.

Economic interests of one nation indirectly fund the military capacity and international influence of the other. China and the United States are each other's economic golden goose; however, subsequent wealth translates into mutually threatening capabilities. Ironically, security dilemma-inspired reactions to respective military capabilities, capabilities possible through economic interdependence, will ultimately diminish the economic well-being of both nations. Both China and the United States must be cognizant of this inherently complex dynamic in order to advance respective interests in a less threatening and counterproductive manner.

#### **Gross Domestic Product Trends**

A relevant measure of economic capacity is gross domestic product (GDP). The United States maintains the world's largest GDP, estimated at over \$15 trillion in 2011.

<sup>&</sup>lt;sup>1</sup> Due to data accessibility, the investigation of US and Chinese economies relies upon GDP as opposed to Gross National Product (GNP). Comparisons noted are consistent with either GDP or GNP. Gross domestic product is the value of finished goods and services produced by labor and property located in a respective nation., Bureau of Economic Analysis.

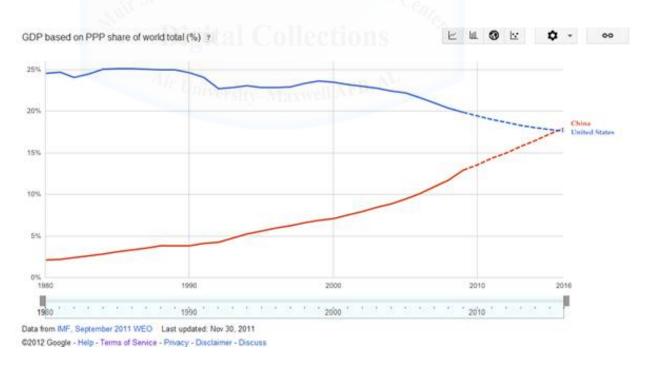
http://www.bea.gov/newsreleases/national/gdp/gdpnewsrelease.htm (accessed 2 May 2012).

<sup>&</sup>lt;sup>2</sup> Bureau of Economic Analysis, "National Economic Accounts,"

Without adjusting for inflation, 2011 American GDP is a modest increase of 2010's GDP of over \$14 trillion.<sup>3</sup> This translates into a per capita income of \$47,390 for the United States.<sup>4</sup>The GDP of the United States more than doubles the next largest economy, China, which boasted a GDP of \$5.926 trillion in 2010.<sup>5</sup> With over 1.3 billion citizens, Chinese per capita income is considerably lower at \$4,720. However, these figures represent a single-year snapshot. The relative growth of the Chinese economy is much greater than moderate absolute GDP gains of the United States. In fact, the PRC's economy annually sustained remarkable double-digit growth since the mid-1990s.<sup>6</sup> At current growth rates, Chinese GDP will match the United States, and subsequent percentage of world GDP, by 2016, as seen in Figure 1.

#### **FIGURE 1: US and Chinese GDP Trends**

Source: International Monetary Fund, "World Economic Outlook." http://www.google.com/publicdata/explore?ds=k3s92bru78li6\_#!ctype=l&strail=false&bcs=d&nselm=h&met\_y=pppsh&scale\_y=lin&ind\_y=false&rdim=country&idim=country:US:CN&ifdim=country&hl=en&dl=en (accessed 2 May 2012).



http://www.bea.gov/national/index.htm#gdp (accessed 2 May 2012).

<sup>&</sup>lt;sup>3</sup> World Bank, "United States," http://data.worldbank.org/country/united-states (accessed 2 May 2012).

<sup>&</sup>lt;sup>4</sup> World Bank, "United States," http://data.worldbank.org/country/united-states (accessed 2 May 2012).

<sup>&</sup>lt;sup>5</sup> World Bank, "China," http://data.worldbank.org/country/china (accessed 2 May 2012).

<sup>&</sup>lt;sup>6</sup> Michael Sheehan, The International Politics of Space, 181.

# **Trade and Debt Relationship**

China is the Great Enabler that supplies the opium for America's budgetdeficit addiction. Stranger still is the real possibility that a major downturn in either economy could lead to economic chaos in the other.

Mike Moore

The United States and China are economic bedmates with a substantial trade relationship. The connection is significant to the extent that either nation would catastrophically suffer from disruption of the other's economy. <sup>7</sup> China's substantial labor force benefits from American desire and consumption of inexpensive goods.<sup>8</sup> The United States extends most-favored nation (MFN) status to China, an agreement which provides favorable rates of duty and increases trade. Furthermore, China's economic growth enables it to be the leading financier of American debt. 10 The Sino-American trade relationship is essential for both economies; however, the larger beneficiary appears to be China when considering trade deficits and national debt.

China exports significantly more goods to America than it imports. The unprecedented trade deficit is a salient cause of the PRC's phenomenal GDP growth. 11 In 2011, the Sino-American trade deficit reached a staggering \$295.5 billion in favor of China. 12 In perspective, the United States deficit is four times greater with China than any other nation. 13 Some economists attribute this vast deficit to an artificially undervalued yuan or MFN status. 14 Nonetheless, American businesses and consumers value inexpensive goods made in China, and the trade deficit continues to soar.

<sup>&</sup>lt;sup>7</sup> Richard A. Clarke and Robert K. Knake, *Cyber War*, 203.

<sup>&</sup>lt;sup>8</sup> Mike Moore, Twilight War: the Folly of U.S. Space Dominance (Oakland, Calif.: Independent Institute, 2008), 264.

<sup>&</sup>lt;sup>9</sup> Joseph S. Nye, *The Future of Power*, 165. <sup>10</sup> Mike Moore, *Twilight War*, 265.

<sup>&</sup>lt;sup>11</sup> Chris C. Demchak, Wars of Disruption and Resilience: Cybered Conflict, Power, and National Security (Oakland, CA.: University of Georgia Press, 2011), 286.

<sup>&</sup>lt;sup>12</sup> Department of Commerce, Bureau of Economic Analysis. "2011 Trade Gap is \$560 Billion." http://www.bea.gov/newsreleases/international/trade/tradannualhighlights.pdf (accessed 2 May 2012).

<sup>&</sup>lt;sup>13</sup> Paul Eckert and Stella Dawson, "10 years in, U.S. Business Relationship Under Strain: China's Entry Into WTO not Delivering Access American Firms Envisioned," Chicago Tribune, 15 December 2011, 3.

<sup>&</sup>lt;sup>14</sup> Paul Eckert and Stella Dawson, "10 years in, U.S. Business Relationship Under Strain," 3.

The PRC's advantageous trade relationship with the United States garnishes benefits beyond GDP growth. Rural poverty decreased to a meager 2.8 percent in 2010, a reduction of 7.4 percent in only five years. Lower poverty serves the PRC's national interests of employment and social stability. Internal Chinese investments in education tripled annual science and engineering degrees and increased annual doctorates elevenfold. Education efforts in science and technology imply further economic and industrial advances in the future. In five years, China quadrupled corporations on the *Fortune 500* list, while American companies on the list decreased by 43. Surplus wealth enables the PRC's international humanitarian efforts which accrue international prestige and soft power. Such investments of rapid wealth suggest a favorable advancement of Chinese national interests into the future.

Additionally, the PRC saves much more of its GDP than it consumes. In 2008, China saved 51.8 percent of its wealth, compared to 13.8 percent in the United States. <sup>19</sup> A notable investment is in foreign reserves. By 2009, China owned 29.7 percent of global foreign reserves, a dramatic rise from 5.3 percent in the mid-1990s. <sup>20</sup> In fact, the European Union (EU) currently seeks China's investment for resolution of its debt crisis. <sup>21</sup> This soft power example highlights relative economic reality, as the United States is fiscally unable to support the EU. Exact estimates vary, but a significant portion of China's \$2.5 trillion in foreign reserves are American dollars and treasury bonds. <sup>22</sup> Although this arrangement finances American debt during a period of economic renewal, the interest on such debt further enhances the PRC's rocketing GDP. To put this in

<sup>&</sup>lt;sup>15</sup> Paul Eckert and Stella Dawson, "10 years in, U.S. Business Relationship Under Strain," 3.

<sup>&</sup>lt;sup>16</sup> Joseph S. Nye, *The Future of Power*, 56.

<sup>&</sup>lt;sup>17</sup> Tai Ming Cheung, "The Chinese Defense Economy's Long March from Imitation to Innovation," *Journal of Strategic Studies*, 34:3, 2011, 336. http://dx.doi.org/10.1080/01402390.2011.574976 (accessed 2 May 2012).

<sup>&</sup>lt;sup>18</sup> Paul Eckert and Stella Dawson, "10 years in, U.S. Business Relationship Under Strain," 3.

<sup>&</sup>lt;sup>19</sup> Kemal Dervis, Masahiro Kawai, and Domenico Lombardi, eds., *Asia and Policymaking For the Global Economy* (Tokyo: Brookings Institution Press and Asian Development Bank, 2011), 38.

<sup>&</sup>lt;sup>20</sup> Kemal Dervis, Masahiro Kawai, and Domenico Lombardi, eds., *Asia and Policymaking For the Global Economy*, 159.

<sup>&</sup>lt;sup>21</sup> Sabrina Mao and Ben Blanchard. "China Reiterates it is willing to help Europe." *Reuters*. 21 February 2011. http://www.reuters.com/article/2012/02/21/us-china-eu-greece-idUSTRE81K0CC20120221 (accessed 2 May 2012).

<sup>&</sup>lt;sup>22</sup> Joseph S. Nye, *The Future of Power*, 56.

perspective, one percentage point of interest will add more than \$140 billion to the annual debt service bill.<sup>23</sup>

# **Military Spending**

As a centrally guided nation with a long-term and systemic planning tradition, China has a much less powerful military and yet increasingly globally large financial leverage.

Chris Demchak

As noted, wealth is fungible toward military capacity. With phenomenal GDP growth, the PRC's military expenditures are increasing. This fact catalyzes American concerns regarding China's international influence and intent. Nonetheless, the PLA's military growth is significantly lower than GDP rise would suggest, at least compared to the United States. Over the past five years, China consistently spent approximately 1.4 percent of its GDP on the military. Since China's GDP rapidly grew, the consistent percentage translates to \$60.1 billion spent in 2008 compared to \$76.4 billion in 2011. Due to its thriving economy, China does not have to invest a higher percentage of its GDP to enhance military capability. From a suspicious American perspective, a \$16.3 billion increase in military spending over a few years could suggest a threatening Chinese aggressiveness. The same figures, however, can illustrate a benign consistency in Chinese behavior with logical military growth proportionate to GDP rise.

During the same period, the United States experienced only marginal economic growth. The United States did not fiscally endure the period's global recession nearly as well as China. America consistently spent roughly 4.9 percent (a constant 3.5 percent more than China) of its GDP on security from 2008 to 2011, averaging \$694 billion per year. The United States spends several times more than its closest competitor on

<sup>&</sup>lt;sup>23</sup> IISS, The Military Balance 2011, 49.

<sup>&</sup>lt;sup>24</sup> IISS, The Military Balance 2011, 33.

<sup>&</sup>lt;sup>25</sup> IISS, The Military Balance 2011, 33.

<sup>&</sup>lt;sup>26</sup> Kemal Dervis, Masahiro Kawai, and Domenico Lombardi, eds., *Asia and Policymaking For the Global Economy*, 151.

<sup>&</sup>lt;sup>27</sup> IISS, *The Military Balance* 2011, 33.

defense, an unsurprising fact given its role as global hegemon.<sup>28</sup> This cost is distributed to the population unevenly, as per capita military spending is \$2153 for the United States compared to the PRC's \$54.<sup>29</sup> Even though defense percentage of GDP is constant for both nations, the figures can be misleading, as GDP is variable and currently favoring China.

In 2008, the United States invested 11.5 times more than China on defense. In 2011, the United States spent *only* nine times more than China. By viewing military expenditure without regard to constant GDP percentage, China appears more aggressive than it may actually be. Furthermore, the potential for misperception is likely to increase as the United States withdraws from Iraq and Afghanistan. Nearly 20 percent of the recent decade's military budget went towards daily maintenance of the two wars. The absence of these war expenditures combined with budget cuts will further decrease the gap of military spending between the US and China. Although contextual and self-imposed defense reductions are essential for American economic renewal, statistics will logically illustrate a relative growth in Chinese defense spending. Assuming continued Chinese GDP growth and a constant spending percentage on defense, the PRC will appear more aggressive due to impending US defense reductions. The threat to the United States is not marginal increases in Chinese defense spending (consistent as a percentage of GDP). The true threat to American influence and interests is its relatively stagnant GDP.

Due to favorable GDP growth, the PRC is able to relatively increase military capabilities, and subsequently improve international influence. If China can sustain its phenomenal growth and the economy of the United States remains stagnant, the respective militaries could reach parity in the foreseeable future. Yet this is possible only if China maintains its double-digit growth in GDP. This, however, appears unlikely since variables such as pollution, corruption, culmination of urbanization, and aging demographics all threaten the sustainability of the PRC's economic progress.<sup>31</sup>

<sup>&</sup>lt;sup>28</sup> Drew Thompson, "Think Again: China's Military," *Foreign Policy*, Issue 178, Mar/Apr 2010, 1. <sup>29</sup> IISS, *The Military Balance 2011*, 473.

<sup>&</sup>lt;sup>30</sup> IISS, *The Military Balance 2011*, 49.

<sup>&</sup>lt;sup>31</sup> Martin C. Libicki, Howard J. Shatz, and Julie E. Taylor, *Global Demographic Change and Its Implications For Military Power* (Tokyo: RAND Corporation, 2011), xxiii, 116.

Nonetheless, as the United States pivots emphasis to the Asia-Pacific, objective analysis of quantity and quality of capabilities should prevent American overreaction and fear. Figure 2 provides a realistic sampling of military capabilities.

Source: Adapted from The Military Balance 2011.

800
700
600
500
400
300
200
100
0
United States
China

China

Figure 2: Current Military Hardware Comparison

The United States military must have the capability to ensure access to the Asia-Pacific region in support of national interests. Therefore, it compares capabilities with the largest potential challenger, the "near-peer" PRC. As noted, the PRC's conventional capabilities do not significantly challenge the United States military. However, the PLA's growing asymmetric capabilities, further discussed in Chapter 3, hinder American offensive potential. Militaries prefer offensive doctrines since they "reduce uncertainty" from enemy actions and generally increase organizational size and wealth.<sup>32</sup>

The wars in Iraq and Afghanistan hindered offensive military investment for the United States, especially regarding naval vessels and aircraft. With a pivot to Asia and a wary eye on China, the Pentagon is able to justify offensive military capabilities neglected with the Global War on Terror. Indeed, a cautious military seeking to replenish advanced hardware may determine China to be its "best ally in the department's

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<sup>&</sup>lt;sup>32</sup> Barry R. Posen, *The Sources of Military Doctrine*, 47, 49.

<sup>&</sup>lt;sup>33</sup> IISS, The Military Balance 2011, 49.

<sup>&</sup>lt;sup>34</sup> Mike Moore, *Twilight War*, 266.

budget wars."<sup>35</sup> Recapitalizing neglected military hardware is an understandable goal for an organization charged with safeguarding the nation and its interests. Nonetheless, a myopic overreaction to the PRC's military expansion may result in consequences counterproductive to the grand strategic interests of the United States.

### A Spiral of Self-Immolation

A nation that lacks an existential threat is a nation with a modest military budget, and there is nothing modest about America's defense budget.

Mike Moore

Perception is reality even if reality roots itself in misperception. The United States and China may choose to view each other either as cooperative powers advancing mutual interests or as competitors threatening the other's interests. Military organizations, inherently cautious and pessimistic, will most likely advance the later perception. As social constructivist Alexander Wendt notes "real or imagined, if actors think enemies are real then they are real in their consequences." 36

If the US military perceives China as an enemy, strategies and subsequent military procurement will advance with respect to the PLA's capabilities. Table 1 highlights military incidents between the US and China which foster an adversarial perception. Contrarily, if the US and China view each other as essential partners, positive military engagements will increase in order to decrease misperception and cooperate on international security issues. Tontemporarily, both nations appear to be cognitively on the fence as to the cooperative or adversarial identity of the other. Through a grand strategic prism, mutual identification of an adversarial relationship will be detrimental to the national interests of both China and the United States.

<sup>36</sup> Alexander Wendt, *Social Theory of International Politics* (Tokyo: Cambridge University Press, 1999), 262.

<sup>&</sup>lt;sup>35</sup> Mike Moore, *Twilight War*, 266.

<sup>&</sup>lt;sup>37</sup> Shirley A. Kan, "U.S.-China Military Contacts: Issues for Congress." Congressional Research Service. RL 32496. 10 February 2012. 20.

**Table 1: Sino-American Incidents Fostering Adversarial Perceptions** 

Source: Adapted from Shirley A. Kan, "U.S.-China Military Contacts: Issues for Congress." Congressional Research Service. RL 32496. 10 Feb 2012, 44-69.

DATE	EVENT
27-29 October 1994	PLAAF fighters intercept US Navy aircraft tracking PLAN submarine
	in Yellow Sea. PRC warns it will fire in the future.
10-11 Mar 1996	US deploys two aircraft carriers to Taiwan in response to PRC's firing
	of IRBMs near Taiwanese port towns.
7 May 1999	US-led NATO forces accidently bomb PRC's embassy in Belgrade
	during OAF
1 April 2001	PLAN F-8 collides with USN EP-3 over South China Sea. China
	detains USN aircrew on Hainan Island for eleven days.
11 January 2007	PLA conducts successful direct-kill ASAT test
November 2007	PRC denies port calls in Hong Kong for USN ships in distress.
4-8 March 2009	PRC aircraft and vessels harass unarmed US ocean surveillance
	vessels in South China Sea.

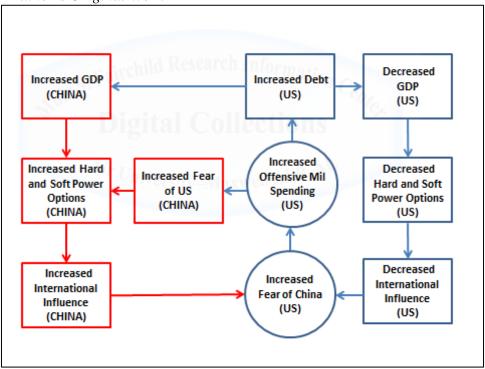
The complexity of the Sino-American relationship roots itself in interdependence of economics. Both nations rely upon the other for economic health. This relationship should promote international perception of cooperation and mutual interest. However, wealth subsequently translates into military capability and international influence. In essence, China and the United States relate as *both* essential enablers and potential detractors of respective national interests. If the respective nations view each other as adversaries, the vicious cycle of the security dilemma commences. A security dilemma between the United States and China is unique in that the potential adversary is a primary funding source of military capability. In the long term, a Sino-American security dilemma will be harmful to both nations. However, in the short-term, the dynamic is much more detrimental to the United States.

Implications transcend the security dilemma if the United States government, or even just its military, identifies the PRC as an adversary. Conventional military superiority is increasingly expensive for the United States. Advanced offensive capabilities are much more expensive than asymmetric anti-access, area denial (A2AD) counters. Essentially, the US needs exorbitant military spending to counter modest

investments of the PLA. Logically, this requires significant expenditure and contributes to national debt in a period requiring economic renewal. As the PRC benefits from US debt, their economy prospers allowing further military procurement. Subsequent increases to the PRC's instruments of power increase international influence and further fuel US anxiety. As this cycle ensues, the US simultaneously decreases its GDP, subsequent instrument of power options, and international influence. Hence, by perceiving China as an adversary and overreacting militarily, the US could ironically facilitate both the rise of China and the decline of the United States. Figure 3 models this unintended dynamic.

Figure 3: The Counterproductive Cycle of Feeding a Dragon

Source: Author's Original Work



Increased offensive capabilities intuitively should increase American hard power options; however, this does not occur in Figure 3. This is due to economic reality, as the United States judiciously decreases federal budgets. High-end offensive capabilities are inherently expensive. Technological expenses will escalate, as asymmetric countermeasures occur relatively easily, as Chapter 3 will illustrate. With an adversarial view of

China, a disproportionate percentage of a decreasing military budget will emphasize major combat operations (MCO). Although conventional credibility has utility, capabilities designed for MCO with China—a nuclear power—occur at great opportunity cost to military requirements across the spectrum of conflict in a complex world.

Tools for MCO provide little utility, or utility at unnecessary cost, for most likely scenarios such as COIN, humanitarian assistance, or limited wars. Conventional war between economically interdependent thermonuclear powers represents the least likely, although most dangerous scenario. The purpose of this paper is not to discern the appropriate balance in preparation across the spectrum of conflict. However, with a decreasing budget, overemphasis on MCO with China undoubtedly occurs with opportunity cost to military options across the conflict spectrum.

The starting point of the counterproductive cycle (Figure 3) is irrelevant. Both the US and China should realize the cycle is occurring. Although in the short-term this scenario appears tremendously advantageous to China, it will ultimately prove detrimental to the PRC as well. The obvious hazard to China is potential escalation into existentially threatening military conflict with the United States. Beyond the perils of hegemonic war, the PRC stands to lose tremendously if the US spirals into economic futility. The PRC's trillions in foreign reserves hinge upon a strong US dollar; therefore, a collapsed American economy will economically devastate China. Furthermore, a defunct US economy would drastically reduce consumption, thereby catastrophically threatening China's GDP, employment, and social stability.<sup>38</sup>

It is clearly not in the interest of the United States to collapse economically or reduce international standing. Although most of the depicted cyclical variables are beyond control of military leaders and US policy makers, such leaders clearly possess agency regarding perception of China and offensive military procurement (variables depicted as blue circles in Figure 3). A perception of China as an adversary undoubtedly will justify procurement of desirable and neglected hardware. Nonetheless, the military is a means to advance national interests, not the national interest itself. While on the cognitive fence regarding China's identity, the United States must view objectively the long-term consequences of its Chinese perception.

<sup>&</sup>lt;sup>38</sup> Joseph S. Nye, *The Future of Power*, 56.

## Chapter 3

# **Asymmetric Spending**

...there is a tendency for the economic costs of maintaining the international status quo to rise faster than the financial capacity of the dominant power to support its position and the status quo.

Robert Gilpin

The United States possesses the world's most technologically advanced military. This fact promotes national interests, yet acquisition and maintenance of such a formidable military becomes increasingly burdensome on the treasury. During austere fiscal times, decisions regarding military expenditures become even more relevant. Maintenance of technological supremacy is much more expensive than efforts to challenge it. Indeed China and other potential adversaries need to spend disproportionately less to challenge American military superiority. This is especially favorable for China, which currently experiences double-digit economic growth. Strategically, the United States must understand the rising costs of military supremacy. Accordingly, cognizance of Chinese asymmetric challenges to space, cyberspace, area denial, intellectual property, and dual-use technology is essential. The effort to maintain a posture of traditional military superiority may ultimately be counterproductive to economic prosperity— and subsequent national interests.

### **Rising Costs of Superiority**

We should resist this temptation to fix technology's excesses by applying even more technology to them.

**Evgeny Morozov** 

The "law of the increasing cost of war" decrees that the dominant power's military capabilities will become increasingly expensive and lead to, "severe fiscal

crisis."<sup>1</sup> There are many reasons for this phenomenon, most notably the relative ease of technological diffusion.<sup>2</sup> The dominant power, currently the United States, invests heavily in research and development of military capabilities, while adversaries eventually reap the benefits without excessive financial burden. As Robert Gilpin notes, "technology is expensive and not easily created, once it is created it usually diffuses relatively easily."<sup>3</sup> Technologically inferior "backward societies" exploit the experience and investment of advanced societies to their own advantage.<sup>4</sup> Furthermore, nations with undervalued currency and cheap labor manipulate technological diffusion to skip historical stages of development pioneered by advanced states.<sup>5</sup> In this context, the United States must spend exorbitantly to maintain temporary military advantages which eventually proliferate into the Chinese arsenal. Considering relative economic positions, technological diffusion disproportionately privileges the Chinese in the long term.

Irrespective of diffusion, technological superiority encourages asymmetric counters against the dominant power. Increasingly, weak states and even non-state actors use asymmetric capabilities to gain influence against technologically superior powers. The Department of Defense understands inexpensive "small-scale technologies can have an impact disproportionate to their size" to threaten American security. Technological momentum indicates an advanced military comes with costly equipment, bureaucracy, infrastructure, and skills. With increasing effectiveness, asymmetric means of space, cyberspace, and area denial negate the capability of advanced technologies. Such implications transcend simple military operations by threatening the economic vitality of the dominant power. Rising states thus benefit from asymmetric military capabilities.

<sup>&</sup>lt;sup>1</sup> Robert Gilpin, War and Change in World Politics, 162.

<sup>&</sup>lt;sup>2</sup> The osmotic nature of technology is not a new phenomenon. Lynn White presented consequential examples of technological diffusion from eastern cultures to medieval Europe. The implications of such diffusion depend upon the condition of society, imagination of its potential, and the nature of the technology. Lynn White Jr., *Medieval Technology and Social Change* (New York: Oxford University Press, 1966), v, 28.

<sup>&</sup>lt;sup>3</sup> Robert Gilpin, War and Change in World Politics, 177.

<sup>&</sup>lt;sup>4</sup> Robert Gilpin, War and Change in World Politics, 179.

<sup>&</sup>lt;sup>5</sup> Robert with the assistance of Jean M. Gilpin, *Global Political Economy: Understanding the International Economic Order* (Princeton, N.J.: Princeton University Press, 2001), 140.

<sup>&</sup>lt;sup>6</sup> T.V. Paul, "Complex Deterrence: An Introduction," 9.

<sup>&</sup>lt;sup>7</sup> Department of Defense, Department of Defense Strategy for Operating in Cyberspace, July 2011, 3.

<sup>&</sup>lt;sup>8</sup> Thomas Hughes, "Technological Momentum" in *Does Technology Drive History: The Dilemma of Technological Determinism*. Eds Merrit Roe Smith and Leo Marx. (Cambridge, MA: MIT Press,1994), 108.

Currently, China displays prowess in asymmetry against the United States. The US should not myopically overreact to such military challenges without considering the long-term economic implications of asymmetric strategies across all domains.

## **Asymmetries in Space**

The space domain offers the United States unmatched military advantage. Global positioning, communications, and intelligence, surveillance, and reconnaissance (ISR) significantly enhance military endeavors throughout air, sea, land, and cyberspace. Increasingly, the technologically superior American military relies upon space assets to remain globally uncontested. To capitalize upon the advantages of space, the US invests heavily. In 2009, the United States military invested \$43.53 billion in space, an imperious figure claiming 95 percent of the world's defensive space expenditure. Furthermore, cost overruns for advanced space technologies average \$1.5 billion per year. This figure nearly matches the PLA's total investment in space, which was only \$1.79 billion in 2009.

As space is a critical enabler for the United States military, challenges to the domain negate the strategic effectiveness of a military costing roughly \$690 billion per year. Accordingly, Chinese strategists believe that negating space advantages will significantly mitigate an American military threat. <sup>12</sup> Furthermore, an American space program seeking "full spectrum dominance" in space is quite threatening to China. <sup>13</sup> The PRC's 2007 antisatellite (ASAT) test illustrates asymmetric mitigation against the American advantage in space. The Chinese ASAT successfully launched a kinetic kill

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<sup>&</sup>lt;sup>9</sup> Space Foundation, *The Space Report 2010: The Authoritative Guide to Global Space Activity.* (Colorado Springs, CO: Space Foundation, 2010), 50.

Mike Moore, Twilight War, 90.

<sup>&</sup>lt;sup>11</sup>Space Foundation, *The Space Report 2010*, 50.

<sup>&</sup>lt;sup>12</sup> Michel Fortmann and Stefanie Von Hlatky, "The Revolution in Military Affairs: Impact of Emerging Technologies on Deterrence," In *Complex Deterrence: Strategy in the Global Age* ed T.V. Paul et al (New York: University of Chicago Press, 2009), 316.

<sup>&</sup>lt;sup>13</sup> US Space Command, *Vision for 2020* (Peterson Air Force Base: Colorado, 1999), 3. quoted in Baohui Zhang "The Security Dilemma in the U.S.-China Military Space Relationship: The Prospects for Arms Control" *Asian Survey*, Vol. 51, Number 2, 2011 316.

vehicle from a modified DF-21 medium range ballistic missile (MRBM). <sup>14</sup> With relatively minor investment with existing hardware, China proved its potential to disrupt billions in US space assets and their subsequent enabling effects. Although counterproductive, the ASAT test also threatened further operations in a fragile space domain, as twenty-two hundred pieces of potentially destructive debris now remain in orbit. <sup>15</sup> Ominously, space disruption is not limited to kinetic kill vehicles, as simple efforts such as frequency jamming and laser disruption can occur inexpensively from terra firma.

If the United States relies upon space for military superiority, logically the nation will seek to defend these assets. However, what are the options of defense against kinetic ASATs? More importantly to the economic vitality of the nation, what is the cost of subsequent defense? In response to the Chinese ASAT test, Senator Jon Kyl advocated special budgeting for space defense that "can be protected from other Air Force priorities." Costly support for technological systems in space occurs with opportunity cost to other missions and the nation at large. Unfortunately, there is "no simple or cost-free solution" to protecting space assets from relatively simple disruptive ASAT capabilities. Space clearly models the "the law of the increasing cost of war" to the economic detriment of the United States.

Options to counter ASATs are exponentially more expensive than the simple launch of an MRBM. The United States could invest in satellite stealth, redundancy, hardening, countermeasures, or rapid replacement. Remotely piloted aircraft could perform satellite functions in contingencies, although this increases non-space costs and negates the utility of substantial space investments. Offensively, the United States might further invest in space or land-based missile defense. Space based weapons are extremely expensive and politically destabilizing as the United States learned via the

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<sup>&</sup>lt;sup>14</sup> Philip Saunders and Charles Lutes, "China's ASAT Test: Motivations and Implications," *Joint Force Quarterly*. Issue 46, 3<sup>rd</sup> Qtr, 2007, 39.

<sup>&</sup>lt;sup>15</sup> James Clay Moltz, *The Politics of Space Security: Strategic Restraint and the Pursuit of National Interests* (Stanford, Calif.: Stanford Security Studies, 2008), 53.

<sup>&</sup>lt;sup>16</sup> Senator Jon Kyle "China's Anti-Satellite Weapons Launch," Remarks to The Center for Strategic and International Studies, Technology and Public Policy Program,

Washington D.C., March 8, 2007. In Vital Speech of the Day, May 2007, 188.

<sup>&</sup>lt;sup>17</sup> Philip Saunders and Charles Lutes, "China's ASAT Test: Motivations and Implications," 41.

<sup>&</sup>lt;sup>18</sup> Philip Saunders and Charles Lutes, "China's ASAT Test: Motivations and Implications," 43.

<sup>&</sup>lt;sup>19</sup> Philip Saunders and Charles Lutes, "China's ASAT Test: Motivations and Implications," 43.

Strategic Defense Initiative (SDI). Technological requirements for such ballistic missile defense could cost the United States three to five *trillion* dollars. On-going efforts to counter ballistic missiles from "rogue" nations have already cost the US \$100 billion with unknown results. ABM technology often requires expensive and groundbreaking technology for unproven effects. For example, the DOD recently ended a 15-year, \$5 billion effort to counter ballistic missiles with airborne lasers. Furthermore, inexpensive countermeasures can negate the effectiveness of expensive defense systems with comparative ease. The United States, therefore, traverses an economically unsustainable path if it seeks to develop technological countermeasures against various threats to its space capabilities.

## **Asymmetries of Cyberspace**

In terms of cyber power's disruption and resilience capacities, the asymmetries are not trending in favor of the United States over the medium and longer term.

Chris Demchak

Like space, cyberspace is an asymmetrically vulnerable domain through which the United States military increasingly enhances its capabilities. Moreover, cyberspace is significantly easier to disrupt than space. In cyberspace "the offense currently has the advantage over the defense" because the domain was "designed for ease of use rather than security."<sup>24</sup> Furthermore, the exceptionally low cost of entry into cyberspace enables any individual with a computer and internet access the capability to "prepare and launch an attack in complete anonymity."<sup>25</sup> Reliance begets vulnerability, and the United States military is notably reliant upon an exceptionally vulnerable cyberspace domain.

<sup>&</sup>lt;sup>20</sup> Everett C. Dolman, *Astropolitik: Classical Geopolitics in the Space Age* (Stanford, Calif.: Routledge, 2002), 161.

<sup>&</sup>lt;sup>21</sup> Joan Johnson-Freese, *Space as a Strategic Asset* (Stanford, Calif.: Columbia University Press, 2007), 127.

<sup>&</sup>lt;sup>22</sup> Associated Press, "US Mothballs Airborne Laser Missile Defense Weapon," March 1, 2012. http://www.cbsnews.com/8301-501366\_162-57388343/us-mothballs-airborne-laser-missile-defense-weapon/ (accessed 2 May 2012).

<sup>&</sup>lt;sup>23</sup> Joan Johnson-Freese, *Space as a Strategic Asset*, 25.

<sup>&</sup>lt;sup>24</sup> Joseph S. Nye, *The Future of Power*, 125.

<sup>&</sup>lt;sup>25</sup> David J. Lonsdale, *The Nature of War in the Information Age: Clausewitzian Future (Strategy and History)* (London: Routledge, 2004), 167.

Cyberspace represents an increasingly attractive domain for potential American adversaries unable or unwilling to confront the United States conventionally. As evidence, cyberspace attackers probe Department of Defense information networks "millions of times every day" resulting in the loss of "thousands of files" for the military, allies, and industry. This poses a nontrivial strategic problem since disproportionate American investment in technology, capabilities, and plans can be exploited inexpensively via simple computer hacking.

The PRC, among other nations, actively supports cyber operations against conventionally superior nations. At the commencement of any military hostilities, PLA doctrine encourages network warfare to paralyze or degrade adversary C4ISR systems.<sup>28</sup> During peacetime, internet-savvy citizens advance the PRC's modernization interests via exploitation of cyberspace.<sup>29</sup> In essence, PRC citizens patriotically conduct a "take home battle" against American information systems from laptops.<sup>30</sup> There are currently over 513 million internet users live in China, 356 million of which gain access to the internet via handheld devices such as smart phones and tablets.<sup>31</sup> In comparison, the entire population of the United States is approximately 312 million.<sup>32</sup> The PRC can spend virtually nothing in cyberspace to degrade significantly expensive US military operations.

Considering the value of cyberspace and ease of attack, defense of the domain is imperative yet, like space defense, is inherently more expensive than offense. Evgeny Morozov notes: "Physical walls are cheaper to destroy than to build; their digital equivalents work the other way around." Security of cyberspace may cost the United States between \$2.3 and \$3.8 billion in 2012. This figure is substantial considering an

<sup>&</sup>lt;sup>26</sup> Chris C. Demchak, Wars of Disruption and Resilience, 179.

<sup>&</sup>lt;sup>27</sup> Department of Defense, Department of Defense Strategy for Operating in Cyberspace, 3.

<sup>&</sup>lt;sup>28</sup> IISS, The Military Balance 2011, 29.

<sup>&</sup>lt;sup>29</sup> Chris C. Demchak, Wars of Disruption and Resilience, 285.

<sup>&</sup>lt;sup>30</sup> David J. Lonsdale, *The Nature of War in the Information Age*, 140.

<sup>&</sup>lt;sup>31</sup> Joe McDonald, "China's Number of Web Users Rises to 513 Million," Associated Press, January 15, 2012. http://news.yahoo.com/chinas-number-users-rises-513-million-023844706.html (accessed 2 May 2012).

<sup>&</sup>lt;sup>32</sup> Census Bureau, "Population Estimates,"

http://www.census.gov/popest/data/national/totals/2011/index.html (accessed 2 May 2012).

<sup>&</sup>lt;sup>33</sup> Evgeny Morozov, *The Net Delusion: The Dark Side of Internet Freedom* (NewYork: PublicAffairs, 2011), 45.

<sup>&</sup>lt;sup>34</sup> Government Accountability Office, *Defense Department Cyber Efforts: Definitions, Focal Point, and Methodology Needed for DOD to Develop Full-Spectrum Cyberspace Budget Estimates,* GAO-11-695R, July 29, 2011, 3.

adversary attacking cyberspace systems can theoretically spend very little and rely on an army of citizen hackers. Compared to efforts in space; however, the budget for security in cyberspace is relatively insignificant. Nonetheless, with increasing civilian and military reliance upon cyberspace, the domain manifests itself as an attractive target to asymmetrically weaken a great power. The United States should anticipate an increase in both quantity and quality of attacks via the cyber domain. As such, expenditure toward defense of the domain will increase well beyond \$3.8 billion per year, an expense gravely disproportionate to the cost of offensive endeavors of disruption.

Disruption in cyberspace exemplifies short-term threats to US military and civilian operations, but exploitation of the domain provides enduring national consequences. Nefarious actors, whether state or non-state, steal intellectual property and conduct espionage via cyberspace with relative ease. Exploitation of a computer network's vulnerability of design or poor operator security offers lucrative and immediate rewards. Espionage via the cyber domain is much simpler and more efficient than physical infiltration or manipulation of disgruntled insiders. China, with mere pennies of cyberspace investment, can steal *billions* of dollars in American technological research. With reverse engineering of stolen intellectual property, the PRC can develop technologies or relative parity without the significant financial burden of research and development. <sup>36</sup>

Espionage and theft of intellectual property are not new phenomena. Sun Tzu observed that "foreknowledge" is "the reason the enlightened prince and the wise general conquer the enemy whenever they move." Although espionage is timeless, its relative ease via cyberspace is a modern phenomenon. The DOD comprehends "sustained intellectual property losses erode both U.S. military effectiveness and national competitiveness in the global economy." President Obama acknowledges intellectual property theft "can erode competitiveness in the global economy, and businesses"

<sup>&</sup>lt;sup>35</sup> Richard A. Clarke and Robert K. Knake, *Cyber War*, 236.

<sup>&</sup>lt;sup>36</sup> Chris C. Demchak, Wars of Disruption and Resilience, 285.

<sup>&</sup>lt;sup>37</sup> Sun Tzu, *The Illustrated Art of War: The Definitive English Translation by Samuel B. Griffith* (New York: Oxford University Press, 2005), 232.

<sup>&</sup>lt;sup>38</sup> Department of Defense, *DOD Strategy for Operating in Cyberspace*. July 2011, 4.

opportunities to innovate."<sup>39</sup> Cyberspace multiplies the effects of an advanced military and economy. Unfortunately, the domain also offers asymmetric vulnerabilities potentially devastating toward economic renewal and national interests. A "near-peer's" tanks, aircraft, and vessels do not represent the true threat to a superior American military. The credible threat is asymmetric, anonymous and ubiquitous; it is merely a few clicks of the mouse from a small number of the PRC's 513 million internet users.

## **Asymmetries of Area Denial**

Asymmetric attack against US space and cyber assets undoubtedly represents a cost effective strategy to negate the advantages of an expensive and potent conventional military. Nonetheless, if cyber and space vulnerabilities do not deter or disrupt American military advantages, the PRC employs asymmetric conventional capabilities. The PLA could not, and subsequently does not plan to, contest American conventional superiority with regular (from the US perspective) combat. A conventionally inferior military force "should usually attempt to gain local or temporary command in areas where the stronger force is not." Considering the tyranny of distance, temporary control via anti-access or area denial (A2AD) capabilities could impose upon the United States a *fait accompli* regarding a dispute over Taiwan or the South China Sea. Consistent with the trends of asymmetry, A2AD capabilities are significantly less expensive than the denied American conventional superiority.

US access to the Asia-Pacific region relies heavily upon air and sea power. The American construct of Air-Sea Battle roots itself in this reality. On the sea, the United States extends global reach via eleven nuclear-powered aircraft carriers. This capability is globally unmatched in power and expense. The People's Liberation Army Navy (PLAN) possesses no operational aircraft carriers, although it is in the process of refurbishing a single Soviet-vintage *Kuznetsov* class vessel. The Chinese acquisition of the *Varyag*, the PLAN's single carrier, for only \$20 million was a bargain in relation to

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<sup>&</sup>lt;sup>39</sup> President, International Strategy for Cyberspace: Prosperity, Security, and Openness in a Networked World, May 2011, 18.

<sup>&</sup>lt;sup>40</sup> John J. Klein, *Space Warfare: Strategy, Principles and Policy*. (New York: Routledge, 2006), 159.

<sup>&</sup>lt;sup>41</sup> Richard A. Clarke and Robert K. Knake, *Cyber War*, 52.

American procurement costs. 42 The USS George H.W. Bush cost the DOD \$6.35 billion to procure, while follow-on CVN-21 aircraft carriers average \$12 billion per copy. 43 Even if refurbished and eventually operational, the Varyag does not represent the true threat to American naval dominance.

Modification of the PLA's existing missile hardware offers denial of superior US conventional forces with minimal expense. YJ-62 anti-ship cruise missiles and modified DF-21 ballistic missiles inexpensively threaten \$12 billion American vessels.<sup>44</sup> Maneuvering ballistic missiles could target US aircraft carriers at Mach 10-12 and pose a challenge exceptionally difficult to negate. 45 If such asymmetric capabilities legitimately threaten expensive national assets, the United States will seek to fund extravagant countermeasures to ensure its A2AD capability. America's path dependence on superior technology undoubtedly provides tremendous capability toward national interests. However, simple AZAD cup...
to the economic detriment of the United States. However, simple A2AD capabilities again highlight the law of the increasing cost of war

## **Aggregate Asymmetry**

China seeks to negate US military superiority through relatively inexpensive ways and means. This strategy is no anomaly; in fact, it increasingly appears to be the standard operating procedure of any potential adversary of the United States. A seemingly standard, albeit unintended, consequence of technological superiority is asymmetric response disproportionate in cost. The grand strategic vision of the United States must comprehend this consequence to sustain economic vitality. The United States does not face asymmetric strategies despite technological superiority. It faces asymmetric strategies because of technological superiority. The PRC's strategies in space, cyberspace, and A2AD catalyze exceptionally expensive responses for the United States,

<sup>42</sup> Peter Winter and John Shea Dixon, "The Interwoven Era: The US, China and its New Aircraft Carrier," The Huffington Post, 08 July 2011. http://www.huffingtonpost.com/peter-winter/the-interwoven-era-theus b 892751.html (accessed 2 May 2012).

<sup>&</sup>lt;sup>43</sup> Ronald O'Rourke, "Navy CVN-21 Aircraft Carrier Program: Background and Issues for Congress," Congressional Research Service Report for Congress. Navy Department Library, 25 May 2005, 05. www.history.navy.mil/library/online/navycvn21.htm (accessed 2 May 2012).

<sup>&</sup>lt;sup>44</sup> IISS, The Military Balance 2011, 197.

<sup>&</sup>lt;sup>45</sup> Thomas Manken, "China's Anti-Access Strategy in Historical and Theoretical Perspective," *The Journal* of Strategic Studies Vol. 34, No. 3, June 2011, 315.

assuming it to maintain conventional military superiority. Even if the US chooses a more cooperative relationship with China, any rational adversary interested in self-preservation will balance the US asymmetrically. No current military can compete with the United States; however, self-imposed economic exhaustion appears to be an alarming threat.

Economic exhaustion is undoubtedly an effect, if not intent, of terror and insurgency threats the United States faces since 11 September 2001. In a statement taped in 2004, Osama bin Laden suggested his goal was economic devastation of the US. 46 Perhaps bin Laden altered al Qaeda's end state in 2004 as a teleological argument. Economic exhaustion may not have been the desired goal of the 9/11 attacks, however, this became an unintended consequence. The 9/11 hijackings, which cost approximately \$400,000 to execute, produced \$27.3 billion in immediate damages to the US. 47

More economically relevant, the United States responded aggressively with Operation NOBLE EAGLE domestically, Operation ENDURING FREEDOM in Afghanistan, and Operation IRAQI FREEDOM in Iraq. By 2011, the US, with its uncontested military superiority, had thus countered a \$400,000 attack with a \$1.283 *trillion* response. Furthermore, conventional US forces confronted asymmetric and inexpensive resistance, such as improvised explosive devices (IEDs). Upgrades in armor, robotics, and surveillance to counter IEDs cost the DOD \$2.8 billion in 2011; meanwhile, an adversary can construct an effective IED for as little as \$30.49 Counterinsurgency expert David Kilcullen surmises Western powers, especially the United States, possess "fabulously capable and appallingly expensive militaries that are precisely adapted to exactly the wrong kind of war." <sup>50</sup>

As efforts in Iraq and Afghanistan decrease and interests shift toward the Pacific, the United States telegraphs intent to avoid lengthy, expensive, and asymmetric COIN operations. The hangover from a decade of COIN is overtly evident, as "U.S. forces will

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<sup>&</sup>lt;sup>46</sup> James Kiras, "Irregular Warfare," in David Jordan, et al. *Understanding Modern Warfare* (New York: Cambridge University Press, 2008), 273.

<sup>&</sup>lt;sup>47</sup> David Kilcullen, *The Accidental Guerilla: Fighting Small Wars in the Midst of a Big One* (New York: Oxford University Press, 2009), 26.

<sup>&</sup>lt;sup>48</sup> Amy Belasco, "The Cost of Iraq, Afghanistan, and Other Global War on Terror Operations Since 9/11," RL33110, *Congressional Research Service*, March, 29, 2011, 1.

<sup>&</sup>lt;sup>49</sup> Rachel Martin, "The IED: The \$30-Bombs That Cost the U.S. Billions" *National Public Radio*. December 18, 2011. http://www.npr.org/2011/12/18/143902421/in-iraq-fighting-an-improvised-war (accessed 2 May 2012).

<sup>&</sup>lt;sup>50</sup> David Kilcullen, *The Accidental Guerilla*, 24.

### AU/SAASS/HAGAN/AY12

no longer be sized to conduct large-scale, prolonged stability operations."<sup>51</sup> With costbenefit analysis and lessons from Iraq and Afghanistan, this policy prioritization is strategically understandable. Avoidance of COIN, nonetheless, does not negate asymmetric resistance to the United States military. Iraq and Afghanistan highlighted to all future adversaries ways to disrupt a superior US military. <sup>52</sup> Insurgents or terrorists do not monopolize asymmetric strategies. An American reprioritization of technological superiority will catalyze asymmetric resistance, irrespective of the potential adversary. As such, the United States must be prepared to spend disproportionately in the long term.

The grand strategy of the United States may determine a conventionally superior military is worth the increasingly disproportionate cost. Tough decisions of competing national interests for finite dollars reside in the domain of elected leaders. Nonetheless, during austere economic periods, a nation must consider both the cost and benefit of increasingly expensive forces. Could the cost of maintaining a technologically superior military contribute to the bankruptcy of the nation as a whole? This scenario is eerily reminiscent to the economic collapse of the Soviet Union. Could an unforeseen economic collapse happen in the United States as it did to the Soviet Union? Such a question demands careful analysis and reflection.

<sup>52</sup> David Kilcullen, *The Accidental Guerilla*, 24.

<sup>&</sup>lt;sup>51</sup> Department of Defense, Sustaining U.S. Global Leadership: Priorities for 21<sup>st</sup> Century Defense, 6.

## Chapter 4

## The Soviet Union Case Study

Unless the Gorbachev regime really manages to transform things, guns will always come before butter and, if need be, before economic growth as well.

Paul Kennedy

With strategic persistence and technological superiority, the United States and its allies won the Cold War by bankrupting the Soviet Union. This Western narrative of success contrasts with the narrative that the Soviet Union lost the Cold War through economic mismanagement and internal contradictions. Irrespective of view, a key element of Soviet collapse was an expensive and unsustainable technological arms race. Some analysts suggest President Reagan's Strategic Defense Initiative (SDI) provided the final technological initiative with which the Soviet Union could no longer compete. Was the technological arms race a determining factor in Soviet collapse? If so, could the same happen to the United States? A comparison of Afghanistan operations, GDP and military spending, and technological arms races highlights similarities and differences between the Soviet Union and contemporary United States.

Historical analysis of the Cold War suggests military spending was a factor in the Soviet collapse, although not the determinant cause. An aggregate of military, political, social, and economic variables resulted in Soviet collapse. Narratives highlighting Soviet military expenditure as the primary catalyst of collapse greatly oversimplify complex international phenomena. Moreover, the contemporary United States military's trends do not compare closely to the actions or societal impact of the Soviet military circa 1989. Writ large, a technological arms race with China may strain American hegemony, but likely not with an impact similar to the Soviet collapse. Nonetheless, a modern arms race will provide opportunity costs to other missions and national endeavors, a reality which receives analysis in Chapter 5. Non-military variables further facilitated Soviet decline. Similarly, non-military variables beyond the scope of this paper, such as national debt,

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<sup>&</sup>lt;sup>1</sup> Everett C. Dolman, Astropolitik, 159.

wealth disparity, and social security and Medicare shortfalls, will challenge American hegemony more than current trends in military expenditure.

## Overextension and Afghanistan

Though most of the landscape is barren and parched, and though its people appear unobtrusive and primitive, this region has nurtured a proud warrior culture that has repelled invading armies for more than two thousand years.

Seth Jones

An unfortunate commonality between the former Soviet Union and present-day America is a prolonged counterinsurgency effort in Afghanistan. The disastrous Soviet endeavor became the final proxy conflict of the Cold War. Strategically, a crumbling Afghan government unable to maintain order or provide services offered a power vacuum on the Soviet border. Fearful of American influence so close to its borders, the Soviet Union provided the Afghan regime support in an intervention expected to last only weeks. Instead, the Soviets engaged in an unsuccessful, nine-year counterinsurgency campaign claiming the lives of over 13,000 troops. Six years into the effort, Soviet leader Mikhail Gorbachev established a timeline to evacuate from the "bleeding wound" of Afghanistan. The Soviet Union desired extrication from Afghanistan with minimal damage to its prestige; furthermore, it aimed to keep Afghanistan out of the control of religious extremists. Nonetheless, the Afghani government remained weak and capitulated to insurgents three years after Soviet withdrawal.

Assuming withdrawal in 2014, the United States will have spent four more years in Afghanistan than the Soviets. Key motivators for the current Afghan insurgency

<sup>4</sup> IISS, *The Military Balance*, 1988-1989 (Reading, Great Britain: Eastern Press, 1989), 31.

<sup>&</sup>lt;sup>2</sup> Seth G. Jones, *In the Graveyard of Empires: America's War in Afghanistan* (New York: WW. Norton & Company, 2010), 22.

<sup>&</sup>lt;sup>3</sup> Seth G. Jones, *In the Graveyard of Empires*, 18.

<sup>&</sup>lt;sup>5</sup> Christopher Paul, Colin P. Clarke and Beth Grill, *Victory has a Thousand Fathers: Detailed Counterinsurgency Case Studies* (Santa Monica, CA: RAND Publishing, 2010), 16.

<sup>&</sup>lt;sup>6</sup> Archie Brown, *The Rise and Fall of Communism* (New York: Harper Collins, 2009), 501.

<sup>&</sup>lt;sup>7</sup> Christopher Paul, Colin P. Clarke and Beth Grill, *Victory has a Thousand Fathers*, 17.

include poor governance and religious ideology, and these same variables thwarted COIN efforts of the Soviet military decades prior. A key difference between Soviet and American efforts, however, involves the nature of the Afghanistan regime. The Soviets attempted to restore order and good governance with an existing regime. The United States, on the other hand, experienced the daunting task of establishing a regime following the overthrow of the Taliban. Considering the cultural complexity of Afghanistan, "building a government in a fractured, xenophobic country is almost infinitely more challenging than overthrowing one." Furthermore, the salient objective of the United States, at least initially, was the destruction of al Qaeda within Afghanistan.

The outcome of American efforts in Afghanistan remains undetermined; however, this is not the basis of comparison. Expensive COIN efforts for both the Soviet Union and United States' superior militaries transcend anecdote or coincidence. The salient difference regards context. During the Cold War, the Soviet Union faced an existential threat and subsequently maintained an unsustainable arms race *while* fighting a counterinsurgency in Afghanistan. The United States does not currently face an existential threat. However, if it chooses to reemphasize technological military investment, this will occur *after* the counterinsurgency in Afghanistan. The United States prioritized COIN efforts and chose to place advanced technologies on hiatus, especially within the Air Force and Navy. Whereas the Soviet Union attempted both technological advance and COIN operations, the United States judiciously emphasized the latter. This point is particularly relevant, considering the Soviet Union's dire economic reality during its final years.

# **Disproportionate Soviet Military Spending**

The moral of the fable is that armaments make impressive exoskeletons, but a shell alone ensures the survival of no animal and no state.

John Lewis Gaddis

<sup>&</sup>lt;sup>8</sup> Seth G. Jones, *In the Graveyard of Empires*, xxix.

<sup>&</sup>lt;sup>9</sup> Seth G. Jones, *In the Graveyard of Empires*, 315.

<sup>&</sup>lt;sup>10</sup> IISS, The Military Balance 2011, 49.

The Soviet Union generally matched the United States in military spending during the Cold War, even though its economy was significantly smaller. <sup>11</sup> The primary contradiction of the Soviet economy was rooted in concentration of production without regard to market prices or consumer demands. <sup>12</sup> Instead of emphasizing economic improvement, the Soviet Union prioritized military might as its basis of superpower status. <sup>13</sup> With a disproportionate emphasis on the military machine, the Soviet Union filtered skilled labor, expertise, and capital essential for competitive civilian economic growth. <sup>14</sup> Expenditure toward an advanced military will always provide opportunity cost for economic and social development. This is undoubtedly an unfortunate national cost for existence in an anarchic international order. By maintaining military parity with the United States, the Soviet's chose an unsustainable strategy with devastating consequences.

As a consistent generalization, the American economy doubled that of the Soviet Union. Therefore, to maintain military parity, the Soviet Union dedicated twice the percentage of its Gross National Product (GNP) in comparison to the United States. <sup>15</sup> In other words, ambitions of military parity compelled the economically weaker Soviet Union to double its opportunity cost toward social and economic development. This trend proved unsustainable, and undoubtedly contributed toward Soviet collapse.

Nonetheless, perceptibly facing an existential threat, the Soviet Union confronted a grim dilemma, as "without military power, it counts for little in the world; with its massive military power it makes others feel insecure and hurts its own economic prospects." <sup>16</sup>

The Soviet Union, therefore, operated disproportionately as a militaristic society with much less regard for prosperity than the United States. Figures of military spending vary greatly due to the secrecy of Soviet society, but some estimates assumed 15-25

<sup>&</sup>lt;sup>11</sup>James Clay Moltz, *The Politics of Space Security*, 212.

<sup>&</sup>lt;sup>12</sup> Paul Kennedy, *The Rise and Fall of the Great Powers: Economic Change and Military Conflict from 1500 to 2000* (New York: Random House, 1999), 493.

<sup>&</sup>lt;sup>13</sup> Archie Brown, The Rise and Fall of Communism, 499.

<sup>&</sup>lt;sup>14</sup> Paul Kennedy, *The Rise and Fall of the Great Powers*, 489, 498.

<sup>&</sup>lt;sup>15</sup> This study utilizes GNP for the Soviet case study as compared to the reliance on GDP for the contemporary US-Sino analysis. This is due to availability of data for respective periods. Variance of GDP and GNP figures for comparative purposes does not significantly impact the general trends of comparison.

<sup>&</sup>lt;sup>16</sup> Paul Kennedy, *The Rise and Fall of the Great Powers*, 513.

percent of GNP went toward defense.<sup>17</sup> Accuracy of figures is debatable, as official Soviet defense figures excluded research and development (R & D) and weapons procurement.<sup>18</sup> Furthermore, with roughly the same population, the Soviet Union maintained twice as many military members as the United States.<sup>19</sup>

The United States, on the other hand, sought technical superiority to both deter the Soviet Union and insulate American societal and economic interests. <sup>20</sup> The United States possessed both the economic and technical might to deter the Soviet Union at approximately half the opportunity cost. Figures from the final years of the Cold War highlight this reality. With an economy more than doubling that of the Soviet Union's, the United States militarily spent an average of 5.77 percent of GNP between 1987 and 1989. Meanwhile, the Soviet Union averaged 12.17 percent of its GNP during the same period (see Figure 4 below).

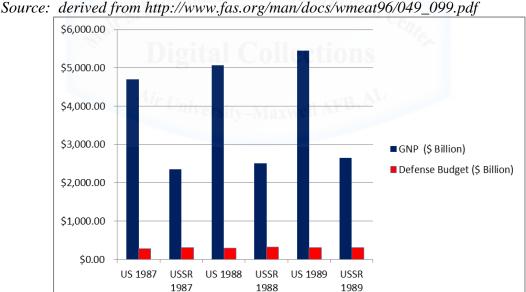


Figure 4: US/Soviet Military Expenditure, 1987-1989

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<sup>&</sup>lt;sup>17</sup> IISS, *The Military Balance*, 1988-1989, 32.

<sup>&</sup>lt;sup>18</sup> IISS, The Military Balance, 1988-1989, 32.

<sup>&</sup>lt;sup>19</sup> IISS, The Military Balance, 1988-1989, 18, 33.

<sup>&</sup>lt;sup>20</sup> Walter A. McDougall, ... *The Heavens and the Earth: A Political History of the Space Age* (Baltimore: Johns Hopkins University Press, 1985), 96.

### AU/SAASS/HAGAN/AY12

The United States confronted the Soviet threat with technological superiority and generally prioritized military quality over quantity. In hindsight, such a strategy deterred the Soviet Union with acceptable cost to domestic interests. Furthermore, the American market system and economic capacity facilitated technological innovation. Meanwhile, the Soviet military attempted technical parity with the United States in the context of a weaker, less entrepreneurial command economy. This resulted in Soviet technologies with less capability, albeit higher relative cost. The following discussion of military technology during the Cold War highlights this disparity.

## **Technological Inferiority**

The dreadful thought that pervaded Soviet debates in the Gorbachev years was that all the USSR's vast military effort had not provided much leverage with the West, and was largely unusable.

Adam Roberts

The technological competition between the United States and the Soviet Union commenced at the onset of the Cold War. Following World War II, Soviet Premier Joseph Stalin sought and obtained nuclear weapons to mitigate the American advantage as quickly as possible. Although superiority of weaponry presented implications for security, the arms race also represented prestige for the opposing ideologies. With the successful Soviet launch of Sputnik, the United States suffered temporary perceptions of inferior technology, prestige, and security. The launch of Sputnik, and the subsequent perception of a missile gap, catalyzed American technological development in a manner with which the Soviet Union could not sustainably compete. The United States countered a temporary Sputnik lag with a robust intercontinental ballistic missile (ICBM) capability, satellite constellation, and prestigious space initiative to place men on the moon. In general, the Soviet Union attempted an expensive endeavor of technological catch-up for the remainder of the Cold War.

<sup>&</sup>lt;sup>21</sup> Walter A. McDougall, ... The Heavens and the Earth, 47.

<sup>&</sup>lt;sup>22</sup> Walter A. McDougall, ... The Heavens and the Earth, 148.

<sup>&</sup>lt;sup>23</sup> Michael Sheehan, *The International Politics of Space*, 33.

An enduring race of technological capabilities proved to be an unsustainable strategy for the Soviet Union. The Russian military's historic advantage was mass and quantity of forces. With engagement in competition of technologies favoring quality over quantity, however, the Soviet advantage diminished.<sup>24</sup> Contradictions of the Soviet system hindered R & D effectiveness, as developers of technology lacked essential incentives, resources, and time to compete technically with the United States.<sup>25</sup> A relative deprivation of technology, perhaps fueled by perceptions of insecurity and diminished prestige, catalyzed an incessant and ineffective Soviet chase of American capability. Although counterfactual, the Soviet Union may have endured longer had it chosen a military strategy of quantity over quality.

Decades into the Cold War, the Soviet Union's ill-advised policy of attempted technical parity proved detrimental. The United States, on the other hand, progressed with various technical advances. In 1989, the United States continued developing technical marvels such as the B-1, B-2, and nuclear-capable Tomahawk cruise missiles. Meanwhile, the Soviet military technologies continually proved ineffective against American hardware in various proxy conflicts. As a counter to the space shuttle program, the Soviet Union invested billions in parallel projects which never became operational. The United States invested 5 billion toward SDI in 1989. To counter SDI, the Soviet Union would have to spend disproportionately toward high technologies such as lasers, optics, computation, and guidance. With a technological race, the Soviet Union engaged in an unsustainable endeavor. However, this alone did not topple the Soviet Union. Domestic and international context, combined with unsustainable military expenditure, facilitated the Soviet's collapse and peaceful culmination of the Cold War.

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<sup>&</sup>lt;sup>24</sup> Paul Kennedy, *The Rise and Fall of the Great Powers*, 500.

<sup>&</sup>lt;sup>25</sup> Walter A. McDougall, ... The Heavens and the Earth, 32.

<sup>&</sup>lt;sup>26</sup> IISS, The Military Balance, 1988-1989, 13.

<sup>&</sup>lt;sup>27</sup> Paul Kennedy, *The Rise and Fall of the Great Powers*, 501.

<sup>&</sup>lt;sup>28</sup> James Clay Moltz, *The Politics of Space Security*, 226.

<sup>&</sup>lt;sup>29</sup> IISS, *The Military Balance*, 1988-1989, 14.

<sup>&</sup>lt;sup>30</sup> Paul Kennedy, *The Rise and Fall of the Great Powers*, 501.

#### **International Context**

Deficiencies in other kinds of power—economic, ideological, cultural, moral—caused the USSR to lose its superpower status, and we can now see that a slow but steady erosion in those non-military capabilities had been going on for some time.

John Lewis Gaddis

In addition to disparities in military technology, the Soviet Union could not compete politically with a democratic West. The lure of democracy triumphed in the latter 20<sup>th</sup> century, as globally democratic states quintupled. Communist states witnessed the relative deprivation of their political and economic systems, while neighboring democratic states enjoyed comparative prosperity. By 1981, the quality of life in the Soviet Union to such a degree that life expectancy of its citizens actually decreased. Unsurprisingly, the ideological soft power of democracy maintained enduring alliances more effectively than the authoritarian offerings of Soviet communism. Failure in Afghanistan debunked the ideological assumption that the Third World preferred Soviet communism. In general, an authoritarian political and economic system rooted in fear juxtaposed poorly with an ideology offering hope and opportunity.

Economically, the Soviet system comparatively underperformed. As noted, the USSR disproportionately prioritized its military instrument of power; however, the relatively inferior capabilities produced little advantage against democratic advance.<sup>37</sup> Additionally, the authoritative imposition of command economies on Soviet subordinates resulted in an exploitative relationship with short-term benefits.<sup>38</sup> Authoritarian control of

<sup>&</sup>lt;sup>31</sup> John Lewis Gaddis, *The Cold War: A New History*, (New York: Penguin, 2005), 264.

<sup>&</sup>lt;sup>32</sup> Adam Roberts, "An 'Incredibly Swift Transition': Reflections on the End of the Cold War." In *The Cambridge History of the Cold War, Volume III: Endings*, eds Melvyn P. Leffler and Odd Arne Estad (New York: Cambridge University Press, 2010), 525.

<sup>&</sup>lt;sup>33</sup> John Lewis Gaddis, *The Cold War*, 84.

<sup>&</sup>lt;sup>34</sup> John Lewis Gaddis, *We Now Know: Rethinking Cold War History* (New York: Oxford University Press, 1998), 191

<sup>&</sup>lt;sup>35</sup> Adam Roberts, "An 'Incredibly Swift Transition'," 520.

<sup>&</sup>lt;sup>36</sup> John Lewis Gaddis, *The Cold War*, 104.

<sup>&</sup>lt;sup>37</sup> Adam Roberts, "An 'Incredibly Swift Transition'," 534.

<sup>&</sup>lt;sup>38</sup> John Lewis Gaddis, We Now Know, 203-205.

the Soviet alliance required a ruthlessness which ultimately ensured policies of long-term economic obsolescence.<sup>39</sup> An underperforming economy and oppressive mentality hindered the quality of life within the Soviet Union and allied states. Ultimately, the burdens of these contradictions resulted in popular internal resistance to the system.

Warsaw Pact inhabitants increasingly rose against the authoritarian structure inherent within Soviet Union while international norms of human rights increased expectations within the authoritarian communist bloc. 40 Opposition movements, mostly non-violent and often fueled by nationalism, proliferated within Poland, Hungary, East Germany, the Baltics, Georgia, Azerbaijan, and Czechoslovakia. 41 Ultimately, it was the "occupied, not the occupiers" who collapsed the Soviet empire through internal lack of legitimacy, as opposed to total economic collapse or military defeat. 42

A narrative of the victors suggests the West won the Cold War, although this perspective is only partially valid. Indeed, superior military technology such as SDI placed the Soviet Union in an economically unsustainable race. Technological inferiority was not the causal factor of Soviet decline, although it highlighted and perhaps exacerbated political and economic contradictions. Western political freedom, economic prosperity, and technological superiority illustrated relative deprivation, but did not cause the discrepancies. In this sense, the Soviet Union lost the Cold War by collapsing under the weight of its internal contradictions while the West contributed to the Soviet loss by displaying a more efficient political, economic, and military alternative. Although counterfactual, the Soviet Union would likely have collapsed even if it did not engage in an unsustainable technological race. An authoritarian and militarized system would have probably spent disproportionately on military quantity even if it did not engage in the race for technological quality. With this perspective on the Cold War, how do the lessons apply to a contemporary competition between the United States and China?

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<sup>&</sup>lt;sup>39</sup> John Lewis Gaddis, We Now Know, 211, 191.

<sup>&</sup>lt;sup>40</sup> Adam Roberts, "An 'Incredibly Swift Transition'," 527.

Adam Roberts, "An 'Incredibly Swift Transition',"529, 532, 260.

<sup>&</sup>lt;sup>42</sup> John Lewis Gaddis, We Now Know, 283, 285.

#### Cold War Relevance Toward US and China

Thus, those skilled in war subdue the enemy's army without battle. They capture his cities without assaulting them and overthrow his state without protracted operations.

Sun Tzu

The context of the Cold War offers interesting parallels toward a contemporary competition between the United States and China. A cursory Cold War analysis could offer a hypothesis in which China underinvests domestically in an attempt to achieve technological parity with the United States. Some advocates, drawing upon the Cold War parallel, consider a technological spending race a wise American endeavor to exhaust Chinese resources. Alternatively, the United States could disproportionately spend on technological advantages negated by asymmetric capabilities. This path parallels Soviet shortcomings against the US. The Cold War, as discussed, represented a lengthy, complex competition transcending military technology and expenditure. A comparison of differences and similarities between the Cold War and contemporary US-PRC competition is therefore beneficial for policy makers.

The differences between the respective periods of competition outweigh the similarities. The Cold War was an existential stalemate between competing ideologies. China's historic activities and contemporary rhetoric suggest the nation is rationally self-interested in prosperity and security, as opposed to international system dominance or imperial outreach. Whereas globally ambitious Soviets spent upwards of 15% of GNP toward the military, the modern Chinese state spends about 1.4%. Arguably, the PLA's purpose is to secure Chinese interests, not overthrow America or the international order. Today, China is an economic superpower and critical trading partner with the United States, whereas the Soviet Union lacked such ties with the United States and overemphasized the military instrument of power to the detriment of its economy. 44

<sup>43</sup> Baohui Zhang, "The Security Dilemma in the U.S.-China Military Space Relationship: The Prospects for Arms Control." 322.

<sup>&</sup>lt;sup>44</sup> Peter L. Hays, "Space Law and the Advancement of Spacepower," In *Toward a Theory of Spacepower: Selected Essays*. Edited by Charles Lutes et al. (Washington, D.C., National Defense University Press, 2011), 311.

Furthermore, the Chinese attempt security through less expensive asymmetric capabilities, whereas the Soviets attempted to reach military parity with the United States at ruinous expense. Considering current ambitions, low military expenditure and R &D costs, and economic assets, it is extremely unlikely the PRC will economically exhaust in a manner similar to the Soviet Union. A Chinese fate similar to the Soviet Union would require an unlikely combination of imperial aspirations, stagnancy of economy, and a tenfold increase in military expenditure percentage to approach relative parity with American military hardware.

Similarly, American efforts do not compare closely with the military overextension of the Soviet Union. The United States militarily invests more of its GNP than does China, but nowhere near the extravagent spending of the Soviet Union. With the end of wars in Iraq and Afghanistan during economic recession, American military spending percentages continue to decrease. During the Cold War, the United States military prioritized technological quality over quantity, a consistent trend albeit with a smaller percentage of GNP. Therefore, the United States, still with the world's largest GNP, will not likely economically collapse due to military expenditure. Growing trade imbalances and national debt, however, pose a grave risk to American economic vitality as well as Chinese economic prosperity. Military expenditure will likely not be the straw that breaks the United States' back. Assuming percentages of military spending do not increase significantly, a technological arms race will impose opportunity costs; however, it should not strategically collapse the United States or international order.

Nonetheless, contemporary similarities with the Cold War provide valid lessons for both the United States and China. China, like the Soviet Union, is a state that values secrecy. For totalitarian states like the Soviet Union and China, such secrecy "fed Western imaginations." For Western states valuing transparency, secrecy among competitors catalyzes the security dilemma and promotes perceptions of nefarious intent. Against the Soviet Union, the United States feared more what the Soviets *might* be doing, as opposed to what they actually *were* doing. <sup>46</sup> Upon awareness of actual Soviet actions, President Lyndon Johnson lamented, "We were doing things we didn't need to do,

<sup>45</sup> Walter A. McDougall, ... The Heavens and the Earth, 241.

<sup>&</sup>lt;sup>46</sup> Stephen Peter Rosen, Winning the Next War: Innovation and the Modern Military (Ithaca, NY: Cornell University Press, 1991), 203.

building things we didn't need to build. We were harboring fears we didn't need to harbor."<sup>47</sup> Lack of Chinese transparency fosters similar insecurities for the United States today. For example, the United States does not understand the PRC's ambitions in the space domain, and therefore assumes the worst as it did against the Soviet Union. Accordingly, the lessons of the Cold War are pertinent for both the United States and China assuming both altruistically favor a cooperative relationship. The United States should avoid fearfully overreacting to unknown Chinese intentions. On the other hand, the Chinese should engage in behavior that is more transparent to limit provocations of American perception and action.

As during the Cold War, regional audiences represent another complex dynamic of US-Sino relations. During the Cold War, the "single most important audience for Soviet chest-thumping was Western Europe." The United States extended security for its European allies, and perceptions of legitimacy were paramount for alliance unity. Therefore, American military vulnerabilities against the Soviet Union translated into vulnerabilities for its allies. This delicate international balance amplified the pressure on American resolve and military capability while further straining the US-Soviet relationship. Similarly, an increase of Chinese capability threatens American regional allies such as South Korea, Japan, Vietnam, and India. If the United States perceives obligation to defend Pacific allies against potential Chinese power, it is logical enhanced resolve and requisite capabilities will further strain the US-Sino relationship. To avoid the pressures of extensive Cold War entanglements, the United States should encourage both cooperative security engagement and increased self-sufficiency among regional allies.

Contemporary China varies significantly from the collapsing Soviet Union. The PRC enjoys a thriving economy. Military expenditures are comparatively low. With the exception of Tibet, China does not impose its political system on subordinate states in an aggressive Soviet manner, nor does it oppressively maintain an empire destined to collapse. Nonetheless, China is authoritarian. Considering the history of the Cold War and trends of democratization, it is unlikely that states will seek to replicate China's

<sup>&</sup>lt;sup>47</sup> Everett Dolman, Astropolitik, 125.

<sup>&</sup>lt;sup>48</sup> James Clay Moltz, *The Politics of Space Security*, 260, 112.

<sup>&</sup>lt;sup>49</sup> Walter A. McDougall, ... The Heavens and the Earth, 240.

### AU/SAASS/HAGAN/AY12

political system. Assuming the United States does not become a tyrannical hegemon, an international order rooted in democracy offers a more alluring ideology. Therefore, internal demands of justice and human rights could threaten Chinese legitimacy in a manner similar to the Soviet Union. As wealth, education, and international communications proliferate, rising popular expectations could strain political legitimacy. A timely variant of Chinese *glasnost* could mitigate internal dissent, assuming the PRC adopts contextual lessons from the Soviet Union.

In general, the Soviet case study does not predict the imminent economic collapse of either the United States or China. Nonetheless, the Cold War indicates how the security dilemma may escalate between the two powers. Assuming no changes in transparency and apprehension, the US-Sino relationship may unnecessarily increase in adversarial inertia. Although preparation for the worst case is wise, the worst case is often a misconstrued concoction of the national psyche. If the United States decides to technological define its military against the litmus of Chinese capability, the nation must do so with informed awareness of actual Chinese capabilities and intent as well as a judicious sense of the inherent opportunity costs.

## Chapter 5

## **Opportunity Costs and Conclusion**

Every action of the master strategist should be intended to increase options, not eliminate them.

Everett Dolman

States gamble with strategies designed to maximize attainment of national interests. States must "plan for attaining continuing advantage" in an anarchic international system. No strategy guarantees success, and all assume inherent risks. The United States now seeks to advance national interests with a prioritization of the Asia-Pacific region. The American military contributes toward regional access via high-tech, expensive forms of power projection. As such, US forces prepare capabilities in relation to the largest potential regional competitor, the PLA. This is a cautious and logical emphasis to guarantee national interests in the region. Technical expertise is essential for control of the commons, surveillance, and conventional conflict in the modern era. Nonetheless, the United States must comprehend and assume the risks of any strategy. To attain continuing national advantage, the United States must consider relevant points, opportunity costs, and implications of its Asian strategy.

# Synopsis of Feeding a Dragon

Regarding academic theory, the future of Sino-American relations is uncertain. The United States bears the burden of potential hegemonic overextension as the PRC increases in power and international influence. However the US and China manage and perceive relative rise and decline will influence relations, for better or for worse. Perception is crucial, as it drives specific national actions with intended and unintended

<sup>&</sup>lt;sup>1</sup> Everett Dolman, *Pure Strategy: Power and Principle in the Space and Information Age* (New York: Frank Cass, 2005), 6.

<sup>&</sup>lt;sup>2</sup> Martin C. Libicki, Howard J. Shatz, and Julie E. Taylor, "Global Demographics and It's Implications for Military Power," (Santa Monica, CA: RAND, 2012), 99-101.

consequences on the domestic and international stage. If the United States views China as a rising but critical partner for national interests, cooperation will likely ensue with inevitable disagreements mitigated by mutual interest. On the other hand, if the United States perceives China as a nefarious, hegemonic threat, a counterproductive, adversarial relationship will emerge. Negative perceptions will further fuel a potential security dilemma and subsequent arms race as both entities bolster regional interests. Both nations publicly advocate an ideal policy of cooperation; however, military actions by both China and the United States designed to protect respective national interests inadvertently undermine such cooperation.

The management of the US-Sino relationship is especially critical considering the economic interdependence. The economic vitality of the United States and China is symbiotic. Unfortunately, a mutually beneficial economic relationship enables mutually threatening military capabilities. The disadvantage for the United States is that national debt and trade imbalances disproportionately benefit China's economy and subsequent military capacity. Although the PLA's budget remains at a consistently low percentage of a prospering GDP, increased Chinese capacity further fuels American insecurities. Therefore, an adversarial strategy against China exacerbates a security dilemma in a manner detrimental to American economic vitality. Perception is paramount, and an adversarial or pessimistic view of China may in fact degrade American economic interests and subsequent international influence.

Asymmetric capabilities compound the negative economic impact upon the United States. To maintain technological superiority, the United States must invest disproportionately more than the PRC. Conversely, with a thriving economy China needs to invest relatively little to counter American military superiority. China's inexpensive asymmetric tactics such as A2AD technology and disruption of space and cyberspace domains potentially mitigate America's superior yet vastly more expensive conventional capabilities. Furthermore, costly R & D required for technological superiority rapidly diffuses, risking neutralization and obsolescence of costly investments. Sustaining technological superiority in anticipation of a potential Chinese threat will become increasingly expensive. The United States must candidly determine if the benefits of

technical supremacy merit the disproportionately increasing costs. If America chooses to perceive China as an adversary, the consequences of this cycle will likely expound.

A security dilemma and subsequent US-Sino arms race would be reminiscent of the Cold War, although the consequences would unlikely be the same. The Soviet Union excessively invested in military technologies in an attempt for parity with the United States. This expenditure occurred at the expense of a Soviet economic system inherently riddled with contradictions and inefficiencies. Contrarily, both the contemporary United States and China have large, dynamic economies and spend relatively low percentages of GDP on the military. US-Sino competition, moreover, reflects national interests more than an international ideological struggle. The Soviet Union experienced internal popular resistance against its authoritarian nature, which may be analogous to potential Chinese challenges. Nonetheless, an adversarial competition between the US and China will cause neither nation to economically implode, assuming military expenditures remain consistent. The most relevant question remains as to the opportunity costs of a Chinese-centric American strategy.

# **Domestic Opportunity Cost**

Every gun that is made, every warship launched, every rocket fired signifies, in the final sense, a theft from those who hunger and are not fed, those who are cold and not clothed.

Dwight Eisenhower

All states must sacrifice some social development to ensure security. Security expenditure represents a necessary tax of national wealth to guarantee the primary condition of state survival.<sup>3</sup> With seemingly infinite interests confined by finite resources, states ensure security with opportunity cost to social development.<sup>4</sup> States must appropriately balance priorities protection, consumption, and investment, and, as the cliché goes, choose between guns or butter.<sup>5</sup> A state must first survive if it is to prosper,

<sup>&</sup>lt;sup>3</sup> Robert Gilpin, War and Change in World Politics, 19.

<sup>&</sup>lt;sup>4</sup> Jurgen Brauer and Hubert Van Tuyll, *Castles, Battles, & Bomb: How Economics Explains Military History* (Chicago, University of Chicago Press, 2008), 11.

<sup>&</sup>lt;sup>5</sup> Robert Gilpin, War and Change in World Politics, 167.

however, state survival occurs at the expense of further development. This vexing conundrum is not unique to the United States. Nonetheless, the contextual situation of the United States amplifies the relevance of spending priorities. As the global hegemon, the United States assumes disproportionate security demands to not only ensure survival, but also preserve a desirable status quo of the international order. This responsibility currently occurs during a relatively stagnant economic period. Therefore, the burdens of hegemony amplify both the consequences of security spending and its impact upon national development. Both demands are seemingly paramount toward national interests, although satisfaction of one degrades the other.

The requirements for sustainable, long-term domestic development are seemingly infinite. Undoubtedly, primary and secondary education in the United States increasingly lags in a manner inconsistent with ensuring national competitiveness. Since 18th-century revolutionary France, no nation has accrued peacetime debt in the magnitude of the modern United States. Technological developments dedicated toward security logically detract from efforts aimed for commercial progress and trade. National investments of revenue and expertise toward short-term security threats occur in lieu of long-term societal and commercial progress. Threats to American hegemony include not only an Athenian-like imperial overstretch, but also domestic "underreach." The Soviet case study illustrates this possibility. Furthermore, the United States competes with states that clearly prioritize domestic development, a consideration which catalyzes relative domestic decline. Currently, China invests relatively more domestically than the United States, a variable which enhances its long-term societal prognosis if the trend continues.

Difficult budgetary priorities represent opportunity cost between security and domestic development. Nonetheless, the inherent dilemmas are not mutually exclusive. The United States must ensure the security of itself and the international order *and* guarantee long-term domestic development. Policy makers must seek the appropriate

<sup>&</sup>lt;sup>6</sup> Joseph S. Nye, *The Future of Power*, 196.

<sup>&</sup>lt;sup>7</sup> Paul Kennedy, *The Rise and Fall of the Great Powers*, 527.

<sup>&</sup>lt;sup>8</sup> Joan Johnson-Freese, Space as a Strategic Asset, 167.

<sup>&</sup>lt;sup>9</sup> Joseph S. Nye, *The Future of Power*, 187.

<sup>&</sup>lt;sup>10</sup> Paul Kennedy, *The Rise and Fall of the Great Powers*, 539.

balance to achieve both. Policies excessively favoring either impose short and long-term risks. Considering political election timelines and noble perceptions of defense, the American strategic environment arguably favors short-term security interests. 11

Irrespective of how the pendulum of national priority swings, opportunity costs manifest. The ideal goal, therefore, is to ensure the most appropriate balance of guns, butter, and production. With relatively low, and decreasing, percentage of GDP dedicated toward security, the United States does not appear to be excessively over-investing in defense. This is especially evident considering international burdens of hegemony. The issue then becomes one of maximizing the effectiveness of military capabilities provided within the constraints of a finite budget. Opportunity cost then descends into the military sphere, as opposed to the national domain. With infinite security requirements and a finite budget, defense capabilities "compete intensely with one another for funds." Military resources designed for specific missions sacrifice utility toward other requirements. By emphasizing costly technological superiority, perhaps gauged against a rising China, what does the United States military sacrifice?

# **Military Opportunity Costs**

The nation does not ask the army to define problems, but to win the war it is engaged in and to ensure the population's protection and security against any threatening danger.

Roger Trinquier

We are now paying for our convenient obsession with a conventional foe.

Counterinsurgency Field Manual

The United States prefers to counter adversaries with technologically-supreme, overwhelming force. After Iraq and Afghanistan, the United States will, "No longer size active forces to conduct large and protracted stability operations while retaining the

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<sup>&</sup>lt;sup>11</sup> Joseph S. Nye, *The Future of Power*, 18.

<sup>&</sup>lt;sup>12</sup> Robert O. Keohane, *After Hegemony*, 364.

expertise of a decade of war."<sup>13</sup> Although the United States aims to retain irregular warfare expertise while reemphasizing conventional superiority, 20<sup>th</sup> century history indicates America will painfully have to relearn the lessons of the last decade. Lessons from the 1940 Marine Corps Small Wars Manual required reevaluation in Vietnam, Iraq, and Afghanistan. <sup>14</sup> After Vietnam, the United States returned to "massive, violent, and utterly conventional" preferences which left the nation ill-prepared for modern counterinsurgency experiences. <sup>15</sup> Are contemporary plans of AirSea Battle merely the modern variant of AirLand Battle following Vietnam? Although rhetoric implies maintenance of current irregular warfare lessons, history suggests such lessons will have to be relearned. It is as if the United States periodically experiences irregular warfare hangovers, vowing to never do it again.

By emphasizing technological superiority, the United States errs on the side of caution, comfortable in its overwhelming conventional superiority. Such a force will likely incite irregular responses, which remain difficult to mitigate. Indeed, technological primacy tends to leave militaries "physically and culturally incapable" of operating at lower levels of intensity. On the other hand, forces designed to counter irregular adversaries will not be capable of defeating peer or near-peer competitors. In 2003, the American military's conventional juggernaut successfully overthrew Saddam Hussein's regime in 21 days. However, the United States proved painfully ill prepared to ensure stability for the subsequent decade in Iraq. Conventional superiority implies irregular responses; wise strategy prepares for both. Historically, the American flaw is perception of the requisite balance as a zero-sum decision favoring superior capability. Imprudent circumvention of irregular warfare preparation will hinder American capacity to mitigate its most-likely threat. The United States may not be interested in irregular warfare, but irregular warfare is interested in the United States.

The utility of conventional superiority diminishes further with the reality of nuclear weapons. The rational fear of annihilation deters major powers from

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<sup>&</sup>lt;sup>13</sup> Department of Defense, *Defense Budget Priorities and Choices*, 5.

<sup>&</sup>lt;sup>14</sup> James Kiras, "Irregular Warfare," 262.

<sup>&</sup>lt;sup>15</sup> Eliot Cohen in Foreward of Roger Trinquier, *Modern Warfare: A French View of Counterinsurgency*, (Westport, CT: Praeger Security International, 1964), x.

<sup>&</sup>lt;sup>16</sup> David J. Lonsdale, The Nature of War in the Information Age, 87.

<sup>&</sup>lt;sup>17</sup> James Kiras, "Irregular Warfare," 227.

conventional engagement. Any nation that could eventually pose a conventional threat to the United States is likely a nuclear power. As long as nuclear weapons remain, irregular warfare and asymmetric threats will persist as a likely challenge in the strategic environment. Moreover, predominance in conventional armament combined with nuclear weapons virtually renders traditional war extremely unlikely. Perhaps this is the strategic concept for the United States. If so, superior capabilities rendering conventional war improbable must maintain sufficient flexibility to counter irregular threats. Flexibility of capability is increasingly important, as the cost of maintaining technological superiority progressively absorbs more of the finite defense budget.

Ideally, military capabilities should possess inherent utility for both most dangerous/least likely and most likely/least dangerous scenarios. This is essential, as "any rational adversary is likely to fight the US using nonconventional means." The requisite balance is an incessant challenge much easier contemplated than accomplished. Expensive and advanced militaries "cannot easily identify a guerrilla from amongst the population," and a military has little chance of defeating "an adversary employing arms and methods the army itself ignores." Preparation against a perceived Chinese threat will further ensure irregular threats for the United States. The pertinent question remains as to whether conventionally superior forces will be flexible enough to counter the irregular responses around the globe. Historically, the answer for the United States is not positive.

Irregular warfare is not the only global threat which will challenge a military disproportionately prepared for conventional superiority. The world is increasingly complex, as are the challenges to American interests. Twentieth-century military solutions may prove archaic against evolving twenty-first century phenomenon.<sup>23</sup> Disparate global threats to security may require various forms of unconventional military

<sup>&</sup>lt;sup>18</sup> Scott Atran, *Talking to the Enemy: Faith Brotherhood, and the (Un)Making of Terrorists* (New York: HarperCollins, 2010), 330.

<sup>&</sup>lt;sup>19</sup> Martin Van Crevald, *Command in War* (Cambridge, MA: Harvard University Press, 1985), 233.

<sup>&</sup>lt;sup>20</sup> David Kilcullen, *The Accidental Guerilla*, 22.

<sup>&</sup>lt;sup>21</sup> David J. Lonsdale, *The Nature of War in the Information Age*, 189.

<sup>&</sup>lt;sup>22</sup> Roger Trinquier, *Modern Warfare*, 3.

<sup>&</sup>lt;sup>23</sup> Audrey Kurth Cronin, *How Terrorism Ends: Understanding the Decline and Demise of Terrorist Campaigns* (Princeton, NJ: Princeton University Press, 2009), 166.

force. Variables such as population, poverty, climate change and scarcity offer threats not readily countered by forces designed to ensure access to the Asia-Pacific region.

Many security challenges are likely to emanate from unsustainable population growth. At present, the global population exceeds seven billion.<sup>24</sup> With estimates of 60 million births per year largely in developing countries, the planet will reach eight billion by the 2030s. <sup>25</sup> Disproportionate population growth in impoverished nations cyclically exacerbates wealth disparity and subsequent maladies. <sup>26</sup> In general, rampant poverty tends to increase internal war, environmental degradation, and further population growth.<sup>27</sup> Such significant population growth will increase both demand and competition for natural resources. By 2030, figures project a 50 percent demand increase in energy, three billion people living without access to clean water, and critical shortages of food.<sup>28</sup> Although conventional superiority may ensure access to resources, such conditions suggest the military must also be prepared to conduct a wide spectrum of stability operations, non-combatant evacuation, and humanitarian assistance.

Climate change cyclically amplifies the problematic conditions of overpopulation. Irrespective of cause, the planet is getting warmer. Average global temperatures increased up to .9 degrees Celsius since 1906, with the rate doubling in the past fifty years. <sup>29</sup> NASA projections suggest an average temperature rise between 2 and 6 degrees Celsius by the end of the 21<sup>st</sup> century.<sup>30</sup> Erratic weather patterns, ice melt, and subsequent sea level rises threaten 20 percent of the world's population living in coastal urban areas.<sup>31</sup> This implies instability associated with mass migration. If human activity contributes to climate change, the phenomena is likely to cycle negatively as global population increases in the magnitude of billions. If climate change is simply a natural cycle, its effects still require mitigation. Subsequent migration, displacement, and

<sup>&</sup>lt;sup>24</sup> Census Bureau, "Census on Campus," http://2010.census.gov/campus/ (accessed 2 May 2012).

<sup>&</sup>lt;sup>25</sup> Joint Forces Command, The JOE 2010: Joint Operating Environment, (Norfolk, VA: USJFCOM, 2010),

<sup>&</sup>lt;sup>26</sup> Bernard Brodie, Strategy in the Missile Age (Santa Monica, CA: RAND, 1959), 409.

<sup>&</sup>lt;sup>27</sup> Martin C. Libicki, Howard J. Shatz, and Julie E. Taylor, "Global Demographics and It's Implications for Military Power," 83, 86.

<sup>&</sup>lt;sup>28</sup> Joint Forces Command, *The JOE 2010: Joint Operating Environment*, 24, 29, 31.

<sup>&</sup>lt;sup>29</sup> NASA, "What is Global Warming,"

http://www.earthobservatory.nasa.gov/Features/GlobalWarming/page2.php (accessed 2 May 2012).

<sup>30</sup> NASA, "How Much More Will the Earth Warm?"

http://www.earthobservatory.nasa.gov/Features/GlobalWarming/page5.php (accessed 2 May 2012).

<sup>&</sup>lt;sup>31</sup> Joint Forces Command, *The JOE 2010: Joint Operating Environment*, 33.

instability from climate change will influence American interests directly and indirectly.<sup>32</sup> Expensive forces designed for A2AD may be ineffective, or excessively inefficient, in securing such interests.

With a conventional, Mercator view of the planet, the United States overlooks, or, more appropriately, *under* looks, a significant threat emanating from climate change. With Arctic ice melting, the region's accessibility improves. Accessible Northern and Northwestern Passage shipping routes above Russia and Canada will greatly alter international economics and relations.<sup>33</sup> Expensive shipping routes are commercially alluring, as northern routes decrease transit time and subsequent costs by a magnitude of 40 percent.<sup>34</sup> Furthermore, resource exploration will increase with access, as estimates of 25-50% of the world's oil reserves reside in the Arctic.<sup>35</sup> At cursory glance, an accessible Arctic appears to be an unintended benefit of climate change. However, United States policy and military forces remain unprepared for the upcoming challenges of Arctic accessibility.

The Arctic now provides the United States threats with which it never had to consider. Competition for resources offers the potential for conflict regarding economic exclusion zones and transit access.<sup>36</sup> Regarding security, America lacks Arctic capabilities regarding communications, maritime warning, and search and rescue.<sup>37</sup> Arctic maritime traffic has increased 61 percent since 2008, yet the United States significantly lags in capabilities such as icebreakers.<sup>38</sup> What was once an impenetrable environmental barrier now melts into an exposed national flank. Implications challenge national concepts of economic vitality, homeland defense, and homeland security. Military capabilities designed for a traditional adversary will offer limited value to the newly emerging and largely ignored Arctic reality.

<sup>&</sup>lt;sup>32</sup> John Mackinlay, *The Insurgent Archipelago* (New York: Columbia University Press, 2009), 221.

<sup>&</sup>lt;sup>33</sup> Joint Forces Command, *The JOE 2010: Joint Operating Environment*, 32.

<sup>&</sup>lt;sup>34</sup> Joint Task Force-Alaska, "Strategic Implications of Arctic Change," (Anchorage, AK: JTF-A, 2009), 4. <sup>35</sup> Joint Task Force-Alaska, "Strategic Implications of Arctic Change," 3.

<sup>&</sup>lt;sup>36</sup> Joint Forces Command, *The JOE 2010: Joint Operating Environment*, 32.

<sup>&</sup>lt;sup>37</sup> Northern Command, "Defense Policy for the Arctic Region." Predecisional draft, (Colorado Springs, CO: USNORTHCOM, 2009), 2-3.

<sup>&</sup>lt;sup>38</sup> Jacqueline Klimas, "Coast Guard Asks to Buy New Icebreaker," Navy Times, March 24, 2012, http://www.navytimes.com/news/2012/03/navy-coast-guard-arctic-ice-breaker-032412w/ (accessed 2 May 2012).

## **Soft Opportunity Cost**

Americans will need to stop asking questions about who is number one, and entertaining narratives about dominance, and start asking questions about how the various tools of power can be combined into smart strategies for power with rather than merely over other nations.

Joseph Nye

As imbalanced military forces limits flexibility toward diverse global threats, imbalanced instruments of power limit international options. The degree of conventional superiority sought by the United States is possible only with great sacrifice toward other instruments that can advance the same international interests. For example, the US DOD is 210 times larger than the United States Agency for International Development (USAID) and the State Department combined.<sup>39</sup> The latter entities represent instruments of soft power, which support US interests via international attraction as opposed to coercion.<sup>40</sup> Soft and hard powers are mutually supporting. However, the rising cost of military capabilities for the United States implies disproportionate investment at the expense of soft power instruments. Again, the strategists should attempt to discern the appropriate balance. The erudite combination of hard and soft power represents a concept which Joseph Nye labels smart power.<sup>41</sup> Without sufficient smart power potential, the United States will be less capable to influence international situations requiring less than coercive methods.

Contextually, the PRC is increasingly adept with employment of soft power. China possesses significant soft power potential due to its favorable economy and limited spending upon coercive instruments. The European Union now seeks China to assist with its economic crisis, as opposed to a fiscally incapable United States. China attracts Middle Eastern regimes with a model of economic success and regime stability without demands of humanitarian reform. <sup>42</sup> This does not mean that the United States should

<sup>&</sup>lt;sup>39</sup> David Kilcullen, *The Accidental Guerilla*, 298.

<sup>&</sup>lt;sup>40</sup> Joseph S. Nye, *The Future of Power*, 52.

<sup>&</sup>lt;sup>41</sup> Joseph S. Nye, *The Future of Power*, xiii.

<sup>&</sup>lt;sup>42</sup> James Chen, "The Emergence of China in the Middle East," Institute for National Strategic Studies *Strategic Forum*, Number 273, December 2011, 4.

abandon promotion of democracy and justice in the developing world, but it implies the United States will be less successful in advancing such ideals if its own model is less economically appealing than China's. Ultimately, China's influence increases in a less threatening manner via methods of soft power. Since China is a permanent member of the United Nations Security Council, the United States wields less international influence over entities positively aligned with the PRC. For example, China recently hindered international sanction efforts against Iran.

Overemphasis on hard power not only reduces soft power options, but also damages soft power itself. Policies imbalanced toward coercion undoubtedly catalyze security dilemmas for adversaries. More troubling, such policies may strain relations with allies. Indeed, "history is not kind to military hegemons" as such policies damage a hegemon's reputation and international attractiveness. <sup>46</sup> This reality limited the tenure of the Soviet Union. Reliance upon hard power triggers unintended challenges, such as strained relationships with allies. <sup>47</sup> Former German Chancellor Gerhard Schroeder, for example, warned that American missile defense efforts could destabilize the North Atlantic Treaty Organization (NATO) by promoting a two-tier security arrangement for its members. <sup>48</sup> US military ownership of the Global Positioning System (GPS) induced European development of its independent Galileo system. <sup>49</sup> Undoubtedly, weapons in space would ensure American space hegemony, but at the long-term risk of a competitive domain utilized by allies and adversaries alike. <sup>50</sup>

Great powers should perceive hard and soft power as a symbiotic relationship, not a binary choice. Hard power provides credibility and the potential to use soft power. Reciprocally, soft power amplifies a state's attractiveness and reduces malignant perceptions inherent with coercive capabilities. Ascertaining the appropriate smart power balance should then cyclically enhance strategic interests in a more efficient and effective

Joseph S. Nye, The Future of Power, 23.

<sup>&</sup>lt;sup>44</sup> United Nations, "UN Security Council Members," http://www.un.org/sc/members.asp (accessed 2 May 2012).

<sup>&</sup>lt;sup>45</sup> James Chen, "The Emergence of China in the Middle East," 1.

<sup>&</sup>lt;sup>46</sup> James Clay Moltz, *The Politics of Space Security*, 315.

<sup>&</sup>lt;sup>47</sup> Joan Johnson-Freese, *Space as a Strategic Asset*, 105.

<sup>&</sup>lt;sup>48</sup> James Clay Moltz, *The Politics of Space Security*, 253.

<sup>&</sup>lt;sup>49</sup> Joan Johnson-Freese, *Space as a Strategic Asset*, 190-191.

<sup>&</sup>lt;sup>50</sup> James Clay Moltz, *The Politics of Space Security*, 328.

manner. With objective analysis, a military and technology-centric path toward Asia does not suggest a future of balanced hard and soft capabilities. With finite resources increasingly dedicated to technological solutions, fewer assets remain to offer soft power options toward global challenges. The United States, therefore, must use coercive measures or no measures at all, in scenarios that may not require hard power. Either way, this decreases the prestige, influence, and soft power capital of the United States for the long term.

Ramifications of a shortsighted security policy in Asia are severe. Figure 3 best illustrates the notional counterproductive path on which the United States could cyclically decline. The United States will have to answer painful questions if it strategically miscalculates. Would the United States ultimately relinquish global hegemony and retrench toward regional interests? Does this imply a bi-polar international order, or the potential rise of others toward a multipolar system? Would the world be less stable without American hegemony? It is historically unrealistic to expect indefinite hegemony, and a resilient United States will undoubtedly adjust to a world in which it is not the hegemon. Nonetheless, it is in the interest of the United States to extend its favorable position for as long as possible to avoid the uncertainty of a changed global order. Therefore, the United States must conduct sage, future-oriented strategies to sustain its global position for the longest possible duration. Cognitively labeling China as a nefarious dragon is not the appropriate strategy.

# A Sage Path

... most of the exertion is devoted to the means—perfecting the military instruments and deciding on their use in battles and campaigns—and far too little is left for relating these means to their ends.

Fred Charles Iklé

Two roads diverged in a wood, and I—I took the one less traveled by, and that has made all the difference.

Robert Frost

A rebalance toward the Asia-Pacific region presents the United States with various strategic opportunities, implications, and risks. Strategic decisions and subsequent resourcing will provide consequences for not only the region, but also for America's ability to influence the international environment. American interests are global, not merely regional. Prioritization of one region must not excessively detract from global influence. Although China is a rising power and potential threat to regional interests, the nation does not hold a monopoly on challenges to the United States. Overreacting to the potential threat presented by China will hinder America's ability to respond holistically to the aggregate of global challenges. The astute strategy is to ascertain the most appropriate balance of capabilities to exert American influence across the spectrum of global challenges. A mismanaged overreaction to a rising China will likely hinder long-term global influence.

The United States will limit its global influence if it chooses a path of conventional technological superiority when confronting the PLA's growing, although inferior, military capabilities. A finite military budget during a recession presents the US military with tough choices. Technological superiority disproportionately increases in cost. Counters to technology are often asymmetric and relatively inexpensive, as China demonstrates. Therefore, the United States engages on a path requiring cyclically greater percentages of its military budget to sustain conventional superiority. This comes with increasing opportunity cost to other global missions as well as domestic needs. If the international environment was a bi-polar, 21<sup>st</sup> century Cold War, disproportionate spending on conventional superiority may be judicious. Yet in the modern reality, conventional capabilities fiscally confined to counter one state will not offer holistic global leverage.

The challenge remains to ensure possession of balanced, flexible forces to respond effectively against the full range of military requirements. The United States must exploit elements of technological superiority, but do so in a manner that does not drastically reduce forces for other missions.<sup>51</sup> It is illogical to produce capabilities which can overthrow a country in weeks, yet be unable to quell the subsequent instability. It is further irrational to maintain forces so strong that the rational adversary must attack with

 $<sup>^{51}</sup>$  David J. Lonsdale, The Nature of War in the Information Age,  $88.\,$ 

asymmetric methods, yet maintain little ability to counter these irregular responses even with excessive investment. Assuming a traditional conflict, losses of any conventional forces will disproportionately diminish US power due to fiscal requirement of lower quantities of high-quality forces.<sup>52</sup> Due to increasing financial costs of superiority, such puzzles will increasingly become the reality for a United States which overemphasizes conventional superiority.

A path of limited options appears contrary to aggregate national interests in a complex world. A rising China provides an enticing excuse for the military to obtain desirable capabilities. Capabilities do not represent national ends; they should be means toward the national ends of policy. The strategic environment provides a myriad of complex threats and uncertainties that transcend simple state rivals. Indeed, the United States military must be able to counter state threats. However, solutions oriented toward excessive technological superiority will reach a point of diminishing returns, rendering the US ineffective against lesser threats and vulnerable to clever, asymmetric strategies adopted by major competitors. A mindset of "multi-role capabilities versus niche capabilities" offers a potential remedy for flexible forces in an uncertain world. If the military desires only conventional war missions, it must be willing to sacrifice substantial resources to other agencies to fill the void. As this is unlikely, the US military must sustain capabilities with sufficient flexibility beyond major conventional operations.

If conventional war is unlikely, a major conventional conflict with a rising China is extremely unlikely, or at least irrational. The notion is contrary to mutually stated desires of a cooperative relationship and interdependent economic order. Considering interdependence, both states could commit economic suicide with conventional conflict. Beyond economic interests, both states possess existentially threatening thermonuclear weapons. China and the United States should ponder less if they *can* take or defend Taiwan with conventional forces. Both states should focus on if they *should* take or defend Taiwan conventionally. Is such an action worth economic devastation? Is Taipei worth Beijing or Los Angeles in a thermonuclear environment? Is conventional superiority merely an augmentation of nuclear deterrence, and if so, is this effect worth

<sup>52</sup> Paul Kennedy, *The Rise and Fall of the Great Powers*, 522.

<sup>54</sup> Department of Defense, *Defense Budget Priorities and Choices*, 6.

<sup>&</sup>lt;sup>53</sup> Fred Charles Iklé, *Every War Must End*, 2<sup>nd</sup> rev. ed. (New York: Columbia University Press, 2005), 14.

the lack of flexibility toward other likely threats? With candid review of implications, the utility of conventional superiority between the US and PRC is strategically questionable. If conventional confrontation will likely result in a strategic environment less beneficial for both nations, why would either rationally engage in such an arms race? The United States must consider this reality during its pivot to the region, as conventional armament designed for China offers increasingly less utility for the aggregate of likely global threats.

There exists a delicate tension between the cautious policy of preparing against China and maintaining a mutually beneficial relationship. Both states desire cooperation; however, both states react to the military capabilities of the other. This is logical, as both the United States and China are rational actors seeking to ensure security. Shortsighted security concerns unfortunately strain long-term efforts toward cooperation contrary to the interests of both nations. The cycle is more detrimental to the interests of the United States, which must spend more to maintain conventional advantage at the cost of other global interests. Without balanced capabilities, the United States will either neglect other interests or spend exorbitantly to excel in all missions. Either unbalanced scenario facilitates the holistic decline of the United States and relative rise of China.

The United States and China will undoubtedly endure conflicts of interests. All nations do. The methods by which the US and the PRC choose to resolve differences are paramount, and largely based upon perception. Overall, it is in the interest of both nations to pursue a cooperative relationship emphasizing mutual interests. Such a dynamic sustains an international equilibrium not worth the cost of changing. An adversarial view of China could facilitate an unsustainable arms race inimical to long-term national interests. Marginal, asymmetric increases in the PLA's capabilities provide tactical and operational challenges to the US military. However, US overreaction will self-induce larger, strategic consequences contrary to long-term economic, diplomatic, and security interests. The United States must choose between two distinct paths toward Asia: one cautiously expects an essential long-term Chinese partner, while the other envisions a dragon. The distinction will make all the difference.

<sup>&</sup>lt;sup>55</sup> Robert Gilpin, War and Change in World Politics, 11.

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